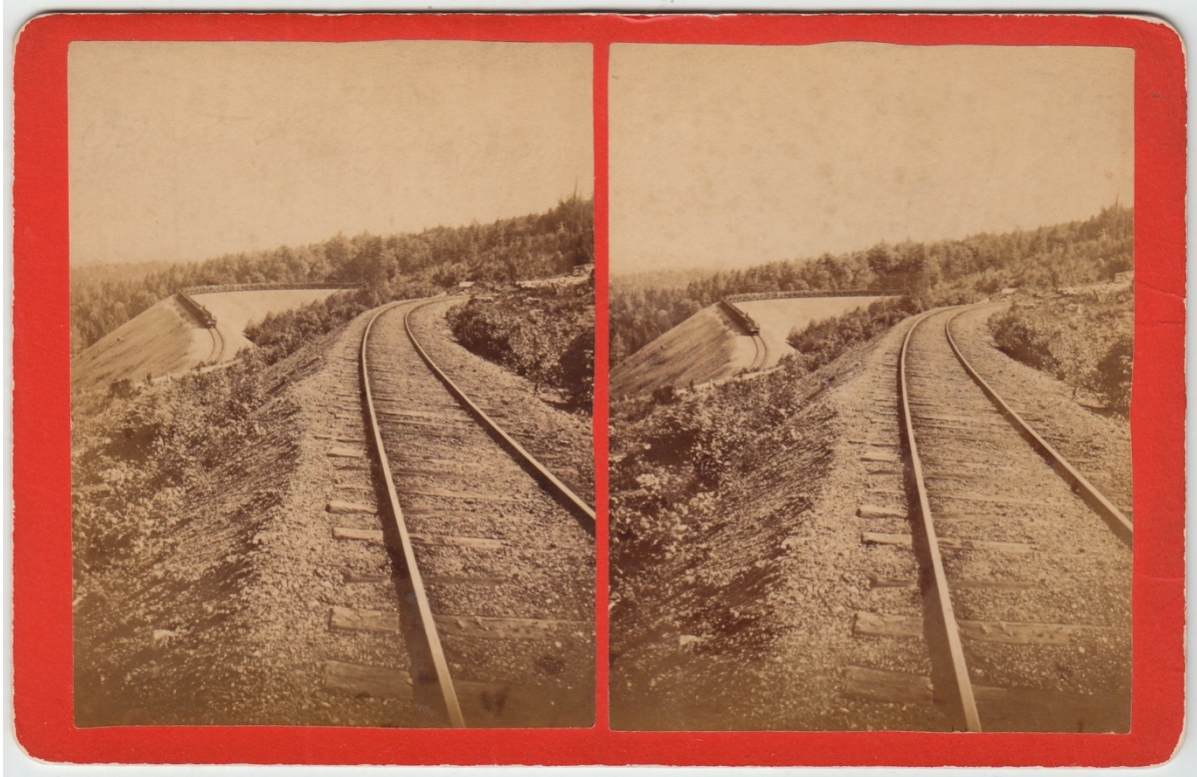


Delaware and Hudson Canal Company Gravity Railroad: 1868 Configuration



*A Ride over the Del. & Hud. Gravity Road into the Coal Regions, Photographed and
Published by L. Hensel, Port Jervis, .N. Y. No. 1120: "View of Shepard's [sic] Crook."
Photograph in the collection of the Carbondale Historical Society and Museum, Inc.*

By

S. Robert Powell, Ph.D.

October 9, 2014

Published by the Carbondale Historical Society and Museum, Inc.

Carbondale, PA 18407

Copyright 2014 Carbondale Historical Society and Museum, Inc.
ISBN 978-0-9903835-3-6

Published by the Carbondale Historical Society and Museum, Inc.
Carbondale, PA 18407 www.carbondalepahistorical.org
October 9, 2014, First Edition

601 pages, illustrated

A History of the
Delaware and Hudson Canal Company
in 24 Volumes

S. Robert Powell, Ph.D., 1974
Indiana University, Bloomington, IN

I	Gravity Railroad: 1829 Configuration
II	Gravity Railroad: 1845 Configuration
III	Gravity Railroad: 1859 Configuration
IV	Gravity Railroad: 1868 Configuration
V	Gravity Railroad: 1899 Configuration
VI	Waterpower on the Gravity Railroad
VII	Working Horses and Mules on the Gravity Railroad
VIII	Passenger Service on the Gravity Railroad
IX	Farview Park
X	The Steam Line from Carbondale to Scranton (the Valley Road)
XI	The Jefferson Branch of the Erie Railroad (Carbondale to Lanesboro)
XII	Reaching Out: D&H Steam Lines beyond the Lackawanna Valley
XIII	Troubled Times—the 1870s
XIV	Carbondale Stations, Freight Houses, and the Carbondale Yard
XV	Locomotives and Roundhouses
XVI	Rolling Stock: Freight and Passenger
XVII	Anthracite Mining in the Lackawanna Valley in the Nineteenth Century
XVIII	Breakers
XIX	The Stourbridge Lion
XX	The Honesdale Branch of the D&H
XXI	The Anthracite Coal Strike of 1902
XXII	The People: the D&H, the Community
XXIII	The Quality of Life in the Lackawanna Valley in the Nineteenth Century
XXIV	The Birth and First Maturity of Industrial America

Acknowledgements

The 24 volumes in this series could not have been written without thirty years of enthusiastic support and guidance from John V. Buberniak, who shares the present author's interest in the history of the Delaware and Hudson Canal Company's Gravity Railroad and Canal.

It is with great pleasure, therefore, that I here (1) acknowledge the crucial role that John V. Buberniak has played in the writing of these books on the D&H, and (2) express my thanks to him for all that he has done to make these books possible.

Another Gravity Railroad historian to whom sincere thanks are due is the late W. E. Anderson, who was Assistant Engineer for the Delaware and Hudson Canal Company and Chief Engineer of the Delaware and Hudson Company for many years.

In 1895, W. E. Anderson brought into existence a map volume titled:

*Delaware and Hudson Canal Company.
Gravity Railroad / Carbondale to Honesdale, 1895.*

In March 1901, W. E. Anderson created a map volume titled:

*Delaware & Hudson Company's Railroad, Honesdale Branch,
Carbondale to Honesdale. March 1901.*

Using those maps, we have been able to identify and describe the five separate configurations (1829, 1845, 1859, 1868, and 1899) of the D&H rail line from Carbondale to Honesdale in the nineteenth and twentieth centuries.

S. Robert Powell

Carbondale, PA 18407

October 9, 2014

Overview

The industrial revolution in America was born on October 9, 1829, in Carbondale, PA, when the first cut of Delaware & Hudson Gravity Railroad coal cars, loaded with mass produced anthracite coal, headed up Plane No. 1 out of Carbondale for Honesdale and to market in New York City.

Those cars, filled with anthracite coal from mines in Carbondale, traveled over 16 miles of railroad tracks, made up of eight inclined planes and three levels, to Honesdale, where the coal was transferred into canal boats and hauled 108 miles, through the D&H Canal, to the Hudson River.

Most of the coal that was sent through the D&H system in the course of the nineteenth century was shipped south on the Hudson River to the New York metropolitan market and to many ports on the Atlantic seaboard, north and south of New York. A large quantity of anthracite coal was also shipped up the Hudson River to Albany, and shipped through the Erie Canal to the American Midwest.

The mining, manufacturing, and transportation system that became operational on that day between the anthracite mines of the Lackawanna Valley and the retail markets for that coal on the eastern seaboard and in the American Midwest was the product of enlightened entrepreneurial, technological, and managerial thought on the part of the officers, managers, directors, and employees of the Delaware and Hudson Canal Company. That system, the first private sector million-dollar enterprise in American history, was, at the same time, the pioneer expression on this continent of mass production, a mode of production that would thereafter characterize industry in America and around the world.

Mass production, the revolutionary engine that made it possible for the D&H to launch its mining, manufacturing, and transportation system in Carbondale on October 9, 1829, and to perpetuate that system well into the 20th century, came into existence when it did and lasted for as long as it did because a body of employees and managers, within the context of a community, of which both groups were a part, chose to work together for their mutual benefit and enrichment, to mass produce and market a commodity, and in so doing to implement the clearly articulated production and marketing objectives of “the company,” the Delaware and Hudson Canal Company.

In this 24-unit work on the D&H,* we will (1) document the history of that mining, manufacturing, and transportation system, with a special focus on the rail lines of the Delaware and Hudson Canal Company in northeastern Pennsylvania, from the opening of the D&H Gravity Railroad in 1829 to the anthracite coal strike of 1902; and (2) demonstrate that the history of that mining, manufacturing, and transportation system, the D. & H. C. Co., from 1829 to 1902, is, at the same time, not only an illustration of eight decades of fine tuning by the D&H of their mass production procedures and techniques but also a full-bodied expression and record, both from the point of view of the D&H and from the point of view of its employees, of the birth, development, and first maturity of the industrial revolution in America.

This is a success story, directed by America's pioneer urban capitalists, and implemented by them and the tens of thousands of men, women, and children who emigrated from Europe to the coal fields of northeastern Pennsylvania in the nineteenth century to work for and with the D&H and to start their lives over again. This is a success story that is important not only within in the context of local, state, and regional history but also within the context of American history. It is a compelling story.

*The present unit focuses on the 1868 configuration of the Gravity Railroad. Each of these 24 units will focus on one aspect of the history of the Delaware and Hudson railroad, from the opening of the Gravity Railroad in 1829 to the anthracite coal strike of 1902. Each unit will be an autonomous entity and published separately.

Delaware and Hudson Canal Company

Gravity Railroad: the 1868 Configuration

Preface

In 1868, in order to increase the quantity of coal that the D&H could send to market to meet, if possible, market demands, "the company," as the D&H was known to all at the time,

(1) revised the 1859 configuration of its Gravity Railroad from Carbondale to Honesdale (cripple car plane, new planes down to Waymart from Farview, Gill's latches, Farnum's latches, new planes up to Farview from Waymart, new Level 20) and enhanced storage/shipping facilities at Carbondale and Honesdale;

(2) established four important extensions of D&H Gravity-gauge tracks "down the line" (to Providence, to Green Ridge, and to the Baltimore mines in Wilkes-Barre)—all part of a concerted program of expansion of D&H mining operations undertaken by President George Talbot Olyphant (elected president on March 15, 1858; took office on March 31, 1858) and Vice President Thomas Dickson;

(3) entered into a contract, in September 1868, with the Erie Railway Company by which they engaged to construct a steam railroad—the Jefferson Branch—from Carbondale to the Erie main line at Lanesboro, to be completed June 1, 1870, the Erie, thereafter, to transport coal for the Delaware and Hudson Canal Company to Rochester and Buffalo;

and (4) entered into a contract, in September 1868, with the Erie Railway Company to transport D&H coal from Honesdale to Weehawken Dock during the winter months.

Who were the people who made a reality the Delaware and Hudson Canal Company's Gravity Railroad in 1868? The primary figures were O. D. Shepherd and Rollin Manville. Who were the people who made possible the four extensions of Gravity-gauge tracks? Who were the negotiators with the Erie? Surely D&H President George Talbot Olyphant and D&H Vice President Thomas Dickson were key players.

"THE DELAWARE AND HUDSON CANAL CO.--The following states the same changes heretofore noted in our columns, with some things additional: / The following change of officers of the Delaware & Hudson Canal Company goes into effect on the first of March: / Thomas Dickson, of Scranton, becomes President, in place of G. T. Olyphant; Coe F. Young, general Superintendent; A. H. Vandling, Superintendent of Rondout department; A. M. Atkinson, of Ellenville, Superintendent of Canal Department; J. B. Fitch of Hawley, continues as superintendent of the Pennsylvania section, including the Delaware aqueduct. / Mr. Atkinson will remove to Honesdale. A thorough repair of the docks &c., here is being made, and workmen are now cleaning out the basin. The canal will probably open by the 15th of March. / The Delaware & Hudson Canal Company are now shipping coal via Honesdale Branch and Erie railroad to all points.--*Wayne Citizen*." (*Carbondale Advance*, Saturday, February 27, 1869, p. 3.)

Summary of Changes Made in 1866-1868 to the Gravity Railroad:

Many of these changes are nicely summarized in *Century of Progress* (pp. 200-201): "To provide for the additional tonnage expected upon the completion of the railroad about to be constructed from Green Ridge to Union Junction, [See the discussion of the relationship between the purchase of coal lands in the Wilkes-Barre area in the late 1860s and the revisions that were effected in 1866-1868 in *A Century of Progress*, pp. 196-202.] further alterations and improvements in the Gravity railroad were commenced in 1866. These improvements, which were of considerable extent, consisted of enlargement of the dock facilities and dumping ground, alteration of plane No. 13 at Honesdale and the construction of a new light car track from Farview down the west side of the mountain to Carbondale, a distance of six miles, on which the cars moved by gravity, eliminating the use of two ascending and eight descending planes. This work was continued through 1867 and completed in the following year, the new track being opened for the movement of light cars on April 21, 1868. . . These alterations, with the exception of some minor changes, were the last made on the Gravity railroad."

Important figures in the history of the D&H at this time:

Pierce Butler: appointed assistant master mechanic of the Gravity Railroad in 1864, and a few years later was named Master Mechanic.

In *Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 544-45, we read:

"PIERCE BUTLER, master mechanic of the Delaware & Hudson Gravity Railroad, was born in Kingston, Luzerne County, Pa., October 13, 1831. . . In early life Mr. Butler learned the machinists' trade in the shops of the Pennsylvania Coal Company at Hawley, Wayne County, PA. . . / Coming to Carbondale in 1865, Mr. Butler took a position as assistant master mechanic of the Gravity Railroad and a few years later was promoted to his present place. . . For many years he has been a worker in the cause of temperance and a member of the Prohibition party."

O. D. Shepherd: Chief Engineer of the D. & H. C. Co.

Coe F. Young: Named General Superintendent on March 1, 1869:

October 24, 1882: Coe F. Young elected vice president and general manager.

Horace G. Young:

In 1882, Horace G. Young was appointed Assistant General Manager. On September 30, 1885, he was appointed general manager, to fill the vacancy created by the resignation of his father, Coe F. Young.

Henry F. Atherton:

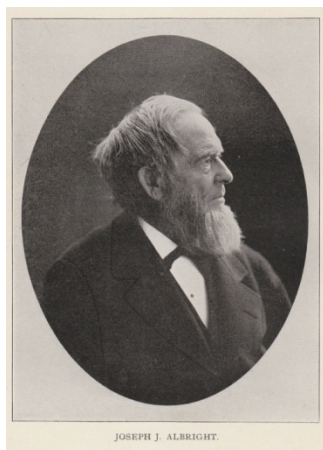
Born in Bernardston, MA, July 30, 1834; named accountant and assistant paymaster of the Delaware & Hudson Canal Company on March 24, 1864.

More about Henry F. Atherton, the man, from his biographical portrait in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897, pp.330-331:

"HENRY F. ATHERTON. It has been customary to speak of men who have raised themselves to honorable stations in life without the aid of wealth or influential friends as 'self-made.' Such a man is the subject of this review, who started in life for himself with no other capital than energy, ability, and a determination to succeed. . . In his life we find an excellent example for young men just embarking in fields of activity showing what may be accomplished by prudence, honesty and industry, for it is in the possession of these qualities that secured for him the position of paymaster for the Delaware & Hudson Canal Company, which he has held since March 24, 1864. / . . . Going back to Honesdale [after serving in Judge Jessup's company in the Twenty-eighth Pennsylvania militia under Colonel Chamberlain], Mr. Atherton held his position there [with Foster Brothers] until March 24, 1864, when he resigned and came to Scranton in response to an invitation from E. W. Weston. He was tendered and accepted the position of accountant and assistant paymaster of the Delaware & Hudson Canal Company, which he held until January 1, 1869, and since then [up to 1897] has been paymaster. This very responsible position he has filled with greatest efficiency, and has disbursed millions without the loss of a dollar to the company. The more than ninety-five thousand bank checks he has issued are arranged on file in numerical order, and every other department of his work is conducted in a manner equally systematic. He is paymaster for all the departments, railroad, coal, real estate and sales. To do this work accurately requires close attention, and obliges him to be constantly at his post of duty. Frequently he has had narrow escapes, as, the fact being known the company always pays in cash, [emphasis added] have been laid to hold him up, but fortunately none of them ever succeeded." At Honesdale, on October 12, 1864, Henry F. Atherton married Abbie Foster Roe, and they were the parents of five children, one of whom, John R. Atherton, in November, 1895, was appointed assistant paymaster for the Delaware & Hudson Canal Company.

Joseph J. Albright: Now in Charge of D&H Mines:

Joseph J. Albright (September 23, 1811—January 12, 1888) took charge of the entire coal mines of the Delaware & Hudson Canal Company in 1866 and remained in that position until 1887, when he retired from business. "He was the first to introduce anthracite coal into the west. Not only did he show the people how to burn it, but had with him hard coal stoves to demonstrate the superiority of the fuel and so induce a trial. He had much to do with the early development of the anthracite trade not only in Buffalo but through the west." (*Portrait and Biographical Record of Lackawanna County Pennsylvania*, p. 206; photo on p. 204, complete portrait, 205-207)



Here is the likeness of Joseph J. Albright that is given on p. 204 in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 204-207.

Joseph Albright, in addition, was one of the founders of the Dickson Manufacturing Company and a director in it until his death. Earlier in his career, he served as assistant manager of Henry Jordan & Company's Oxford furnace, at Oxford, NJ, and later, near Nazareth, PA, he was asked to take charge of the Catherine furnace and forges, the largest plant of its kind in eastern Pennsylvania. It was Joseph J. Albright who introduced successfully the first hot blast applied to making iron in the United States.

1869

OFFICERS of the D&H:

Elected May 13, 1869

Thomas Dickson, President (G. T. Olyphant resigned on May 10 due to impaired health); C. P. Hartt, Treasurer; R. H. Nodyne, Secretary; James C. Hartt, Sales Agent; Coe F. Young, General Superintendent

MANAGERS of the D&H:

Charles N. Talbot, Edward Woolsey, G. T. Olyphant, A. A. Low, R. N. Kennedy, James M. Halsted, L. G. B. Canon, James R. Taylor, Thomas Dickson, O. D. F. Grant, John Jacob Astor, Thomas Cornell, W. J. Hoppin

1870

OFFICERS of the D&H:

President, Thomas Dickson, Scranton, Pa.; Treasurer, Chas. P. Hartt, New York City; Secretary, Richard H. Nodyne, New York City; Sales Agent, James C. Hartt, New York City. / General Superintendent, Coe F. Young, Honesdale, Pa.; Superintendent of Coal Department, E. W. Weston, Providence, Pa.; Superintendent of Railroad Department, R. Manville, Carbondale, Pa.; Superintendent of Canal Department, Asher M. Atkinson, Honesdale, Pa.; Sales Agent Southern and Western Department, James J. Albright, Scranton, Pa.

MANAGERS of the D&H:

Charles N. Talbot, Edward J. Woolsey, George Talbot Olyphant, Abiel A. Low, Robert Lenox Kennedy, James M. Halsted, Le Grand B. Cannon, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, W. J. Hoppin, Isaac N. Seymour

1872

OFFICERS of the D&H:

President, Thomas Dickson; Secretary, Daniel Wilson

MANAGERS of the D&H:

James M. Halsted, Robert Lenox Kennedy, W. J. Hoppin, Thomas Cornell, John Jacob Astor, A. A. Low, Thomas Dickson, James B. Taylor, George T. Olyphant, Edward S. Woolsey, LeGrande B. Cannon, Charles N. Talbot, Isaac N. Seymour

May 10, 1873: Robert M. Olyphant (younger brother of George Talbot Olyphant) elected a manager to fill the place made vacant by the decease of George Talbot Olyphant. Eleven years later, Robert M. Olyphant became the sixth president of the D&H

1874

OFFICERS of the D&H:

President, Thomas Dickson, Scranton, Pa.

Assistant-President, Harwood V. Olyphant

Treasurer, James C. Hartt, New York city

Secretary, George L. Haight, New York city

Sales-Agent, Rodman G. Moulton, New York city

General Manager, Coe F. Young, Honesdale, Pa.

General Agent of Real Estate Department, E. W. Weston, Providence, Pa.

Superintendent of Coal Department, A. H. Vandling, Providence, Pa.

Superintendent of Railroad Department, R. Manville, Carbondale, Pa.

Superintendent of Canal Department, Asher M. Atkinson, Honesdale, Pa.

Superintendent of Rondout Department, A. Osterhout, Rondout, N.Y.

Sales Agent Southern and Western Department, Joseph J. Albright

MANAGERS of the D&H:

Charles N. Talbot, Abiel A. Low, Robert Lennox Kennedy, James M. Halstead, Le Grand B. Cannon, George Cabot Ward, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, W. J. Hoppin, Pierpont Morgan, R. M. Olyphant

1875

OFFICERS of the D&H:

Thomas Dickson of Scranton, Pa., President; James T. Hartt, of New York, Treasurer, and George L. Haight, also of New York, Secretary.

MANAGERS of the D&H:

Abiel A. Low, Robert Lenox Kennedy, James M. Halstead, Le Grand B. Cannon, George Cabot Ward, James Roosevelt, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, W. J. Hoppin, J. Pierpont Morgan and Robert S. Hone.

1876

MANAGERS of the D&H:

A. A. Low, R. L. Kennedy, James M. Halstead, LeGrand B. Cannon, George C. Ward, James Roosevelt, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, W. J. Hoppin, J. P. Morgan and R. S. Hone

1877

MANAGERS of the D&H:

Abiel A. Low, Robert Lenox Kennedy, James M. Halsted, Legrand B. Cannon, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, J. Pierpont Morgan, George Cabot Ward, Robert S. Hone, James Roosevelt, and Levi P. Morton

Charles W. Scharar named assistant to the mining engineers' corps in 1880:

1880, July 16: Charles W. Scharar, who was born in Wilkes-Barre on January 4, 1863, was appointed an assistant to the mining engineers' corps of the Delaware and Hudson Canal Company, eventually being named, in 1887, mining engineer. In 1895, he was named division mining engineer of the Delaware & Hudson Canal Company, with headquarters in Scranton. As such, he was in charge of two corps, and with ten mines under his supervision. The father of Charles W. Scharar, Christian H. Scharar, "was born in Germany, and at the age of two years was brought to America by his parents, who settled in Luzerne County. There he grew to manhood and at an early age became familiar with mines and mining, to which industry his life has been devoted. For some years he has held the responsible position of chief engineer of the coal department of the Delaware & Hudson Canal Company, with headquarters in Scranton." *Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 1064-1065)

In 1881, Eugene A. Wonnacott became a citizen of Carbondale, ultimately becoming baggage master at Carbondale:

Eugene A. Wonnacott, who was born in Waymart, June 20, 1859, became a citizen of Carbondale, and in 1897 was serving as baggage master at Carbondale. About the man, we read the following in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, p. 571: "EUGENE A. WONNACOTT. . . has been a citizen of Carbondale since 1881 and has recently built a comfortable residence at No. 34 Darte Avenue. His first work in life was on the railroad and he has been promoted from one position to another until now he is serving in the capacity of baggage master. / The Wonnacott family originated in England, whence Daniel, our subject's father, emigrated to America in young manhood, settling in Pennsylvania and securing work on the Delaware & Hudson Railroad. For more than forty-five years he has been employed on the Gravity branch of this road, and his long service testifies to his industry, fidelity and energy. He resides in Waymart, Wayne County, of which place he is a respected citizen. By his marriage to Minerva Bunnell, he had thirteen children, [among whom are] Eugene A.; and Emma, wife of D. B. Robbins, a conductor on the Delaware & Hudson Railroad. . . / . . . When but twelve years of age, he [Eugene A.] began to work for himself, his first employment being that of water carrier to a gang of men on a railroad section. Next he was given work as brakeman on the Gravity road between Waymart and Honesdale, and from that transferred to a coal train. As he proved capable and reliable, he was promoted to be brakeman of a passenger train and afterward was given the position of baggage master at Carbondale, which he has held for a number of years."

1884

OFFICERS of the D&H:

"President—Thomas Dickson, Scranton (April 23, 1884, Thomas Dickson's serious illness reported to Board of Managers; May 14, 1884, Thomas Dickson re-elected President; on July 31, 1884, he died). Robert M. Olyphant becomes 6th president of D&H.

Vice President—Robert M. Olyphant, New York City.

General Manager—Coe F. Young, Honesdale, Pa.

Treasurer—James C. Hartt, N. Y. City

Secretary—F. Murray Olyphant, do

Ass't Gen'l Manager—Horace G. Young, Albany, N. Y.

Sales Agent—Rodman G. Moulton, New York City

Gen'l Agent of Real Estate Department—E. W. Weston, Providence, Pa.

Sup't of Coal Department—A. H. Vandling, Providence, Pa.

Superintendent of Railroad Department—R. Manville, Carbondale, Pa.

Sales Agent Southern and Western Department—Joseph J. Albright, Scranton

Northern Railroad Department—Division Superintendents—C. D. Hammond, Albany, Theodore Voorhees, Troy, N. Y.

Resident Counsel—Edwin Young, Albany

Consulting Engineer—C. W. Wentz, do."

MANAGERS of the D&H:

Abel A. Low, James M. Halsted, Legrand B. Cannon, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, Robert S. Hone, James Roosevelt, Abraham R. Van Nest, Hugh J. Jewett, David Dows, Robert M. Olyphant.

1885: "NOTES OF VARIOUS INTERESTS. / O. F. Young has resigned the Vice-Presidency of the Delaware and Hudson Canal Company, his resignation to take effect as soon as his successor is elected. Mr. Young's resignation was not in consequence of any trouble or disagreement in the board." (*The New-York Times*, July 18, 1885)

1888: Charles H. Norton named manager of the retail department of the Delaware & Hudson Coal Company:

About Charles Norton, we read the following in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 358-59 "Charles H. Norton, manager of the retail department of the Delaware & Hudson Coal Company, was born November 27, 1863, in the city of Carbondale, where he still resides. . . At the age of fourteen he (Charles H. Norton) became a breaker boy in the employ of the Delaware and Hudson Coal Company, afterward was promoted to be weighmaster at shaft No. 3, later was made assistant of the retail coal department, and in 1888 was made manager of the retail department, in which capacity he has since been employed." Charles H. Norton's father James was the general coal inspector for the Delaware & Hudson. In the biographical portrait of Charles H. Norton referenced above, we read the

following about his father: ". . . James, was born in Ireland, and at the age of fourteen years accompanied his parents to America, where he became an employe of the Delaware & Hudson Company at Carbondale, and retained his connection with that organization throughout his entire business life, holding the position of general coal inspector." Charles' brother James also became general coal inspector for the Delaware & Hudson.

Charles C. Rose, General Superintendent of the coal department of the Delaware & Hudson Canal Company:

Portrait of the man in *PABRLCP*, pp. 827-28: "CHARLES C. ROSE, general superintendent of the coal department of the Delaware & Hudson Canal Company, and one of the successful civil engineers of Scranton, is a descendant of substantial New England ancestors, who for successive generations were honorably identified with the history of the country. . . / The father of our subject, William C. Rose, was born in Massachusetts, accompanied the family to New York and was reared near Sherburne. When a young man he was employed on Erie Canal and afterward was made superintendent on the Delaware & Hudson Canal, continuing there for forty years. . . / The marriage of William C. Rose united him with Lovina Shimer. . . Of her six children, three sons and two daughters are living. Lyman O., who resides at Honesdale, is superintendent of the Delaware & Hudson Canal. . ." Charles C. Rose, the youngest of those six children, worked for the D&H and other railroads, in various capacities, over the years. In January 1896, he accepted the position of assistant superintendent of the coal department of the D&H. On January 1, 1897, he was named superintendent. . . . / Following the death of his first wife, Emma K. Watson, Charles C. Rose married Emma Vandling, the daughter of A. H. Vandling, the former superintendent of the coal department of the Delaware & Hudson Canal Company."

Those, then, are some of the key players in the installation and successful operation of the 1868 configuration of the Delaware and Hudson Canal Company's Gravity Railroad.

Table of Contents

6801	Introduction
6801.1	Foot of Plane No. 23 to Providence
6801.2	Foot of Plane No. 23 to Providence: Coal
6801.3	Foot of Plane No. 23 to Providence: Passengers
6801.4	Green Ridge to Wilkes-Barre
6802	Thomas Dickson Elected President of D&H
6803	The Major Revisions for the 1868 Configuration
6804	Surveying for the 1868 Revisions
6805	Rollin Manville and O. D. Shepherd
6806	Loaded Track: Planes 1-12
6807	Plane No. 1
6808	Plane No. 2
6809	Cripple Car Track
6810	Plane No. 3
6811	Plane No. 4
6812	Plane No. 5
6813	The “Switchback” in 1883? Hendrick's Depot in 1883?
6814	Plane No. 6
6815	Plane No. 7

- 6816 D&H Ice at Plane No. 4 and Plane No. 7
- 6817 D&H Ice at Keen's Pond
- 6818 D&H Stone Quarry at Plane No. 7
- 6819 Plane No. 8
- 6820 Plane No. 9
- 6821 Plane No. 10
- 6822 Plane No. 11
- 6823 Waymart Dumping Ground
- 6824 Plane No. 12
- 6825 Downtown Waymart
- 6826 Level No. 12 (Ten-mile Level)
- 6827 The Gravity Railroad and the D&H Canal Came Together at Honesdale:
Let's Have a Look Around
- 6828 Six Downtown Honesdale Subjects
- 6829 Foot of D&H Plane No. 13; D&H Office; Coal Office
- 6830 Union Planes Loaded and Light
- 6831 Beginning of the D&H Canal
- 6832 Erie Pockets
- 6833 Union Docks

- 6834 Gravity Depot at Honesdale
- 6835 Planes No. 13-17, revisions; Planes 18-20
- 6836 Plane No. 13
- 6837 Cellar Hole No. 1 and Gill's Latches
- 6838 Plane No. 14
- 6839 Cellar Hole No. 2 and Farnum's Latches
- 6840 Plane No. 15
- 6841 Plane No. 16
- 6842 Plane No. 17
- 6843 Snow Sheds on the Gravity Railroad, and Rail Bridges over the Gravity Railroad on the Western Side of the Moosic Mountain
- 6844 Planes and Levels in Downtown Waymart
- 6845 Plane No. 18
- 6846 Plane No. 19
- 6847 Plane No. 20
- 6848 Level 20: Farview to Carbondale, via Shepherd's Crook, to Bushwick Junction, to Archbald (the new light track)
- 6849 Braking on the Light Track
- 6850 Early Passenger Traffic on the Gravity Railroad

- 6851 Switchbacks in the 1868 Configuration
- 6852 Statistics on the Gravity Railroad after the Installation of the 1868 Configuration
- 6853 Enlargement of Storage Facilities at Honesdale and Carbondale
- 6854 Carbondale and the D&H in General at the time of the 1868 Configuration
- 6855 Honesdale and the D&H in General at the Time of the 1868 Configuration;
Seven Bridges of Honesdale
Pennsylvania Coal Company's Railroad
- 6856 The D&H Gravity Railroad and Canal: Selected Bibliography

Introduction

Following the completion of the 1859 configuration of the Gravity Railroad from Carbondale to Honesdale, the D&H was poised to increase, significantly, the quantity of coal shipped through its system to market. Given the in-place technical capacity to ship more coal, the D&H focused on (1) obtaining additional coal properties, especially in the Lackawanna Valley, and (2) on acquiring additional railroad facilities, mostly leases, to supply new markets, notably in the Albany area and beyond.

Four important extensions of D&H Gravity-gauge tracks took place at this time:

1. Foot of Plane No. 23 to Providence (passengers)—third rail installed in steam line
2. Foot of Plane No. 23 to Von Storch and Richmond breakers—Gravity tracks all the way
3. Providence to Green Ridge and Vine Street (passengers)—third rail installed in steam line
4. Providence to Green Ridge to Baltimore Mines in Wilkes-Barre (coal)—third rail installed in steam line

None of these extensions of Gravity-gauge tracks involved inclined planes and levels, as in the existing Gravity system then in operation. On these extensions, Gravity Railroad coal cars, loaded and light, and Gravity Railroad passenger cars were moved by Gravity-gauge steam locomotives on essentially flat ground.

6801.1

1. Foot of Plane No. 23 to Providence (passengers)—third rail installed in steam line

As we saw in the unit on the 1859 configuration, the foot of Plane No. 23 was the end of the line in the Gravity system at this time. In order to move Gravity coal and passenger cars from that point to the South, a short Gravity-gauge line had to be constructed from the foot of Plane No. 23 to the South, with a bridge across the Lackawanna River. Once across the Lackawanna River, at Valley Junction, there were two options: (1) the passenger cars were moved onto the newly-constructed (completed in February 1860) D&H 4-mile steam locomotive rail line—standard gauge and gravity gauge—for the trip from Valley Junction and Providence (the complete steam line between Providence and Carbondale was completed in 1871); (2) the coal cars were moved on a separate Gravity-gauge track, to the West of the steam line, to the Von Storch and Richmond breakers.

The motive power used to move these passenger cars from Olyphant to Providence and return was, initially, two horses, driven tandem, soon to be replaced by a Gravity-gauge steam locomotive, the Major Sykes:

This we know from the article (in a Gritman scrapbook) titled **"THE DELAWARE & HUDSON RAILROAD. / It Employs 1,200 Men in Carbondale and Disburses over \$300,000 Annually"** in the archives of the Carbondale Historical Society:

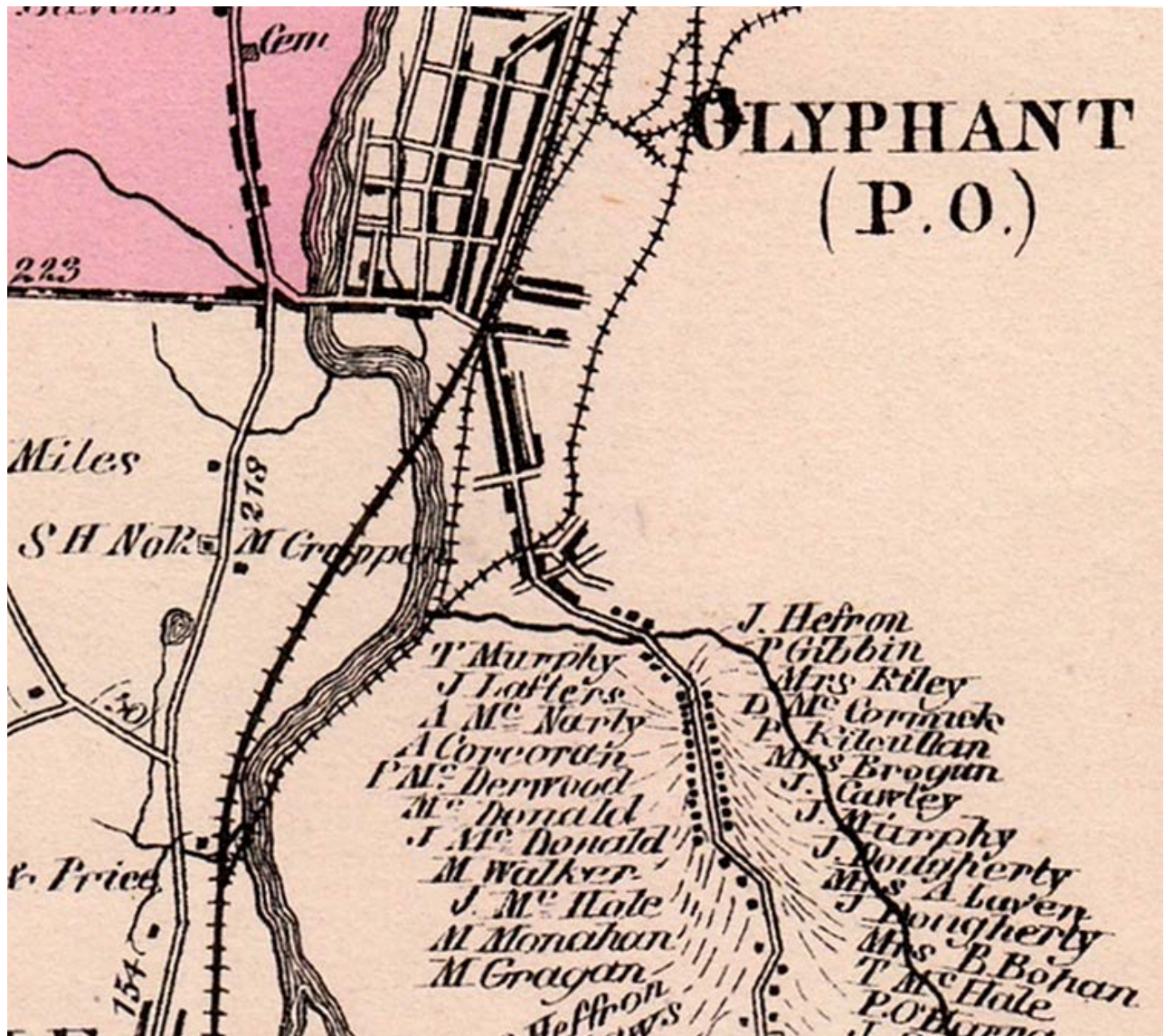
"The locomotive railroad, of the Delaware & Hudson Canal Company, might be said to have had its beginning in February, 1860, when passenger cars were hauled between Olyphant—the terminus of the Gravity road—and Providence, a distance of a little more than three miles. The motive power at first consisted of two horses, driven tandem. After a month or so, the horses were replaced by a locomotive, and the 'Major Sykes,' the first [Gravity gauge] locomotive built for the Delaware & Hudson company's use on this side of the mountain, performed the work."

In the two views given below from the *D. G. Beers* 1873 map, we see

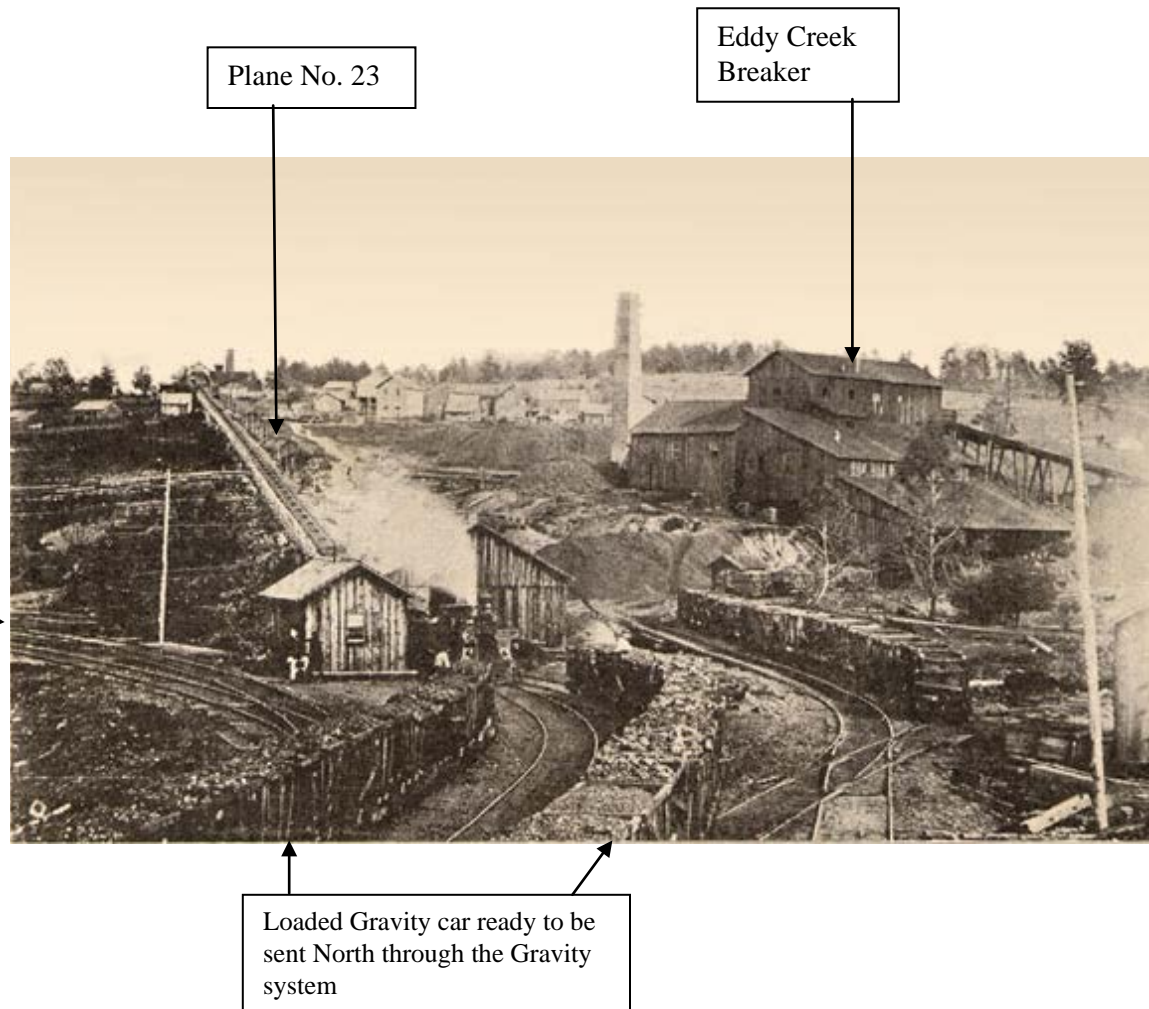
(1) the junction point of the loaded and the light tracks. It is at the point where the Eddy Creek and the Lackawanna River come together. That is also the base of Plane 23 "G". The light track comes down (more or less perpendicularly, on the map shown here) on the east side of the Lackawanna River. The loaded track goes off to the right and ascends what is now named Gravity Street. No. 23 engine, of course, is at the head of Gravity Street. At that point the level between the head of No. 23 and the foot of No. 24 heads north (almost on the perpendicular on the map shown here).

(2) the short track from the base of Plane 23 to its connection, on the west side of the Lackawanna River, with the D&H locomotive line. That point is Valley Junction. There is probably a bridge (possibly two) abutment there today. Using this short track, empty Gravity cars could cross the steam line (with a third rail) and travel south on a separate Gravity-gauge track, to the West of the steam line, to the Von Storch and Richmond Breakers. Similarly, loaded coal cars could be brought back to Valley Junction and hauled to the foot of Plane No. 23 for shipment to market.

This view is an enlargement of the view shown immediately above.



Foot of Plane G: where the loaded and light tracks of the Gravity Railroad came together. This photograph is used by *Lowenthal* on page 230, where he identifies the photograph as one by Johnson (Scranton, PA), 1860. Lowenthal's source of the photograph is the National Canal Museum.



Foot of Plane G: where the Gravity Railroad connected to the Valley Road (to Providence). Plane G ascends the hill, with two strings of loaded cars at the base of the plane, ready for shipment. The multiple tracks of the light track are seen at the left. The Eddy Creek Breaker is on the right. Two tracks from the breaker came down from the breaker a short distance and then connected up with the D&H Gravity tracks at the junction of the loaded and light tracks.

This area today, as seen from up on the hill behind the smoke stack of the Eddy Creek Breaker, in Smoketown, looking down the hill, is shown in the photograph given below, taken by the author on June 30, 2011. Smoketown was partly in Throop borough and partly in Olyphant borough. There was a row of D&H houses, all painted red, on the spine of the Smoketown hill. These houses were called Red Row, which was in the Throop part of Smoketown. Special thanks to Bob McDonough to showing the author this site and for sharing his knowledge of the area.

View from Smoketown, looking West, at the site where the foot of Plane No. 23 was located.



Two accidents on Plane No. 23 in 1862:

L. Laman run over by coal cars near Plane G:

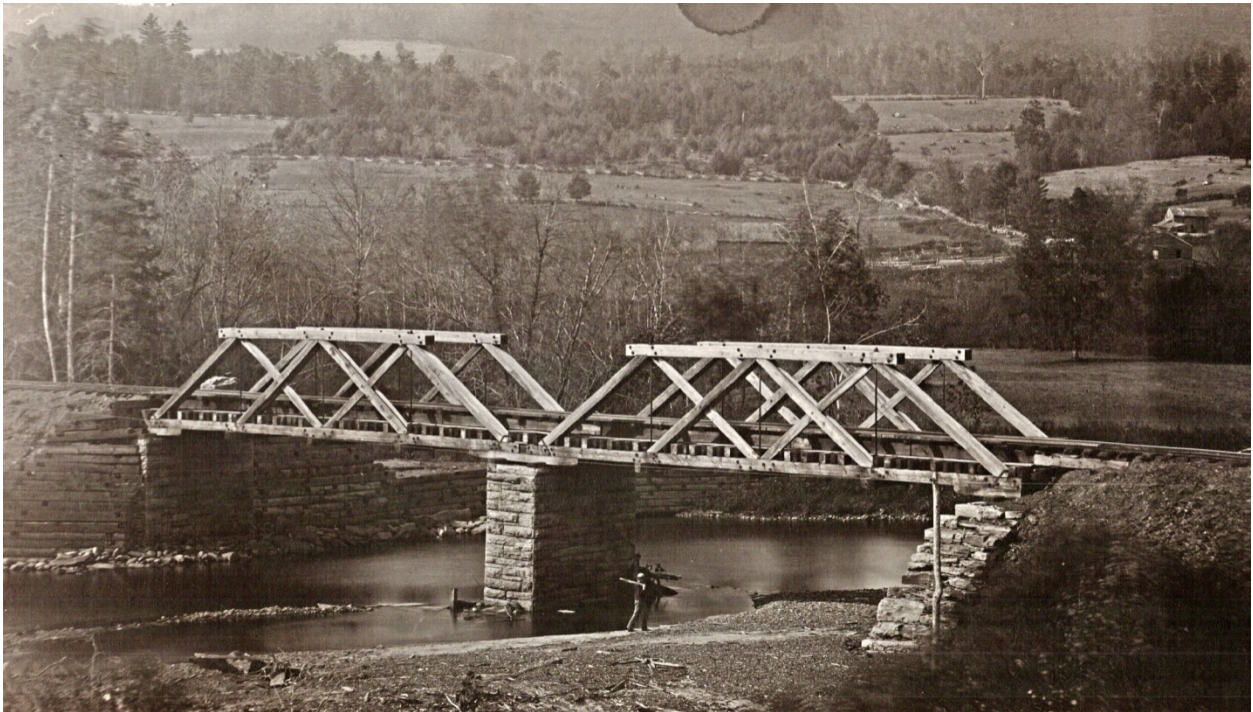
“Mr. L. Laman formerly of this place [Carbondale] was run over by the coal cars upon the Railroad near Plane G on Tuesday of this week. He died of his injuries the following day.” (*Carbondale Advance*, August 30, 1862, p. 3)

George G. Griggs run over by fourteen coal cars:

“Died, at Olyphant, on the 29th ult, George G., son of Mr. Orlin Griggs of Carbondale, aged 13 years and 15 days. / George came to his sad and sudden death in the following manner: By permission he accompanied Mr. Luther Ellis down the railroad on a lumber car with a coal car attached, employed for carrying mine props. While these cars were stopped on the down track at Olyphant near the foot of Plane G, a train of coal cars overtook them. It is supposed that George jumped off to avoid the shock of a collision and as he was attempting to get on again, the toe of his right foot caught in the wheel above the truck of the coal car attached, throwing him down and dragging him for some rods, when his lower limbs by some means were thrown across one rail of the track and the 14 coal cars passed over him, awfully mangling and really severing his body. His remains were conveyed to his afflicted parents at Carbondale, where his funeral was attended on the following day at the Baptist church by a crowded and sympathizing congregation. Many of his companions in the Sabbath School were present to participate in the sad and solemn services.” (*Carbondale Advance*, December 6, 1862, p. 3)

In the view given below, we see the bridge (erected in 1859 or 1860) that carried the short track from the foot of Plane No. 23 across the Lackawanna River, where it connected to the D&H steam line track to Providence. This is a photograph by Johnson (Scranton, PA), dated 1860.

BRIDGE NEAR OLYPHANT,
DEL. & HUDSON CANAL CO.



A print of the photo given above is in the archives of the Minisink Valley Historical Society. In the Osterberg volume on the D&H, this bridge is incorrectly identified, on p. 14, as being “located on the long descending plane near Prompton.”

This photograph was taken by “Johnson, Scranton, Pa.,” in 1860. An original print of this Johnson photograph is in the archives of the Wayne County Historical Society and it is from that original that we have produced the copy given here. Imprinted on the front of this photograph in the archives of the Wayne County Historical Society is the following identification for this photograph:

BRIDGE NEAR OLYPHANT,
DEL. & HUDSON CANAL CO.

The bridge shown above remained in service until 1883, when it was replaced by an iron one made of T-rail in Mr. Wyllie's blacksmith shop in Carbondale:

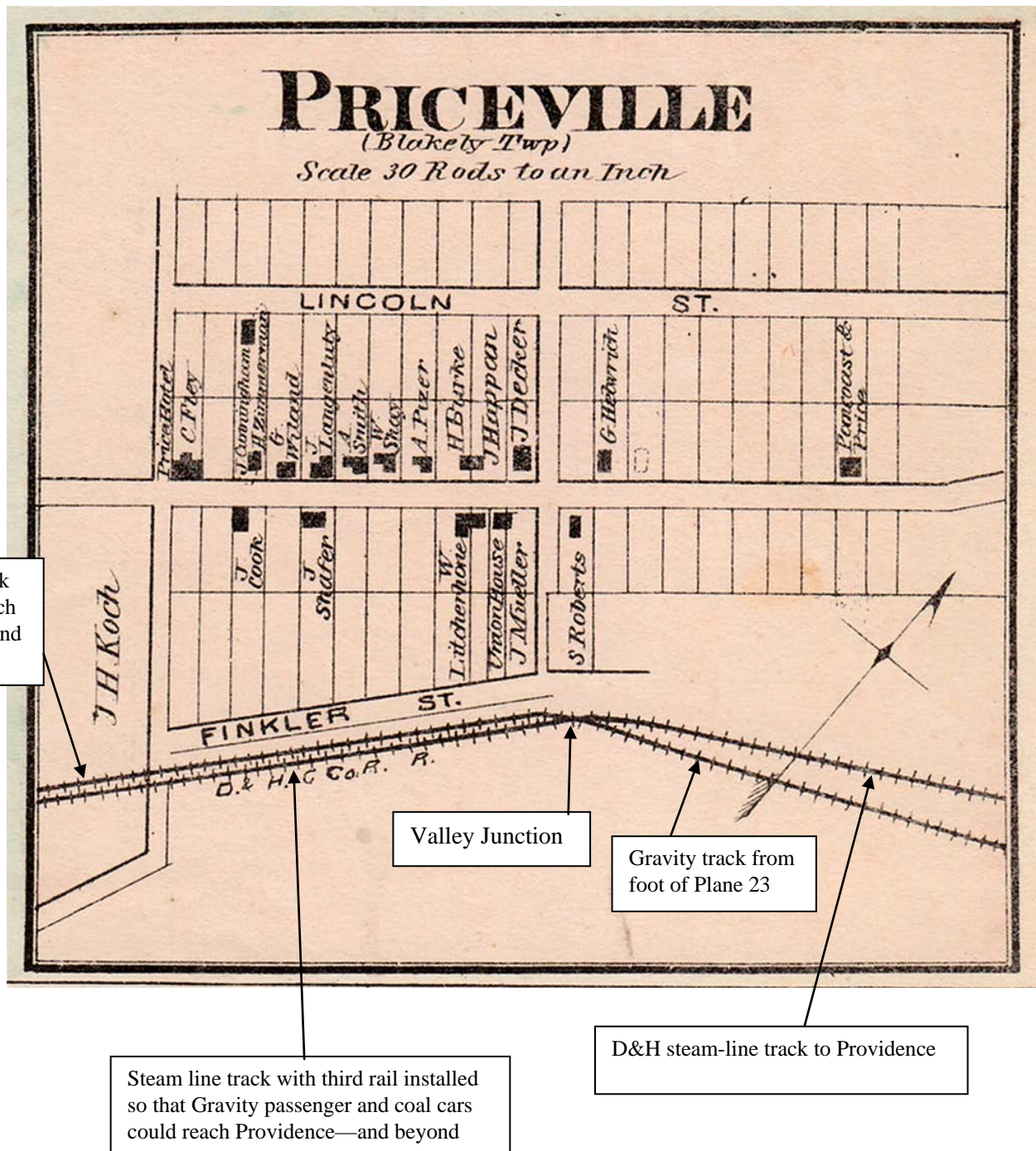
Wooden bridge replaced by iron one made of T-Rail:

"The old wooden bridge at Valley Junction has been replaced by an iron one made of T rail. The new bridge was made in Mr. Wyllie's blacksmith shop here [Carbondale], and is a model in its way. It was placed in position by the bridge carpenters last week." (*Carbondale Leader*, April 20, 1883, p. 3)

After the short Gravity track from the foot of G crossed the Lackawanna River, it headed south on its own roadbed on the west side of the locomotive line, to the Von Storch Breaker in Green Ridge and the Richmond Breaker. Gravity passenger cars could also access the steam line at this point (which was both standard and Gravity-gauge) and travel south to Providence. This intersection of the Gravity line and the steam locomotive line along Finkler Street and the street that runs at right angles to Lincoln Street in Priceville (Dickson City) is Valley Junction.

Where was the Richmond Breaker? Not sure at this point. We do know that W. H. Richmond and C. P. Wurts were in partnership in the Elk Hill colliery at Dickson City in the period 1860-1863. This we learn from the obituary of Charles Pemberton Wurts that was published in the *Carbondale Leader*, August 16, 1892, p. 4. Therein, we read: "From that year 1860 to 1863 Mr. Wurts was in partnership with W. H. Richmond in the Elk Hill colliery at Dickson City and about the same period he was associated with Edward Jones, Lewis Pughe, and Abel Barker in developing the mines at Olyphant. He was also identified with other industries in this locality."

Valley Junction (the junction of the Gravity tracks and the steam-line tracks south of Olyphant), as seen on the Priceville map in the *D. G. Beers* map volume:



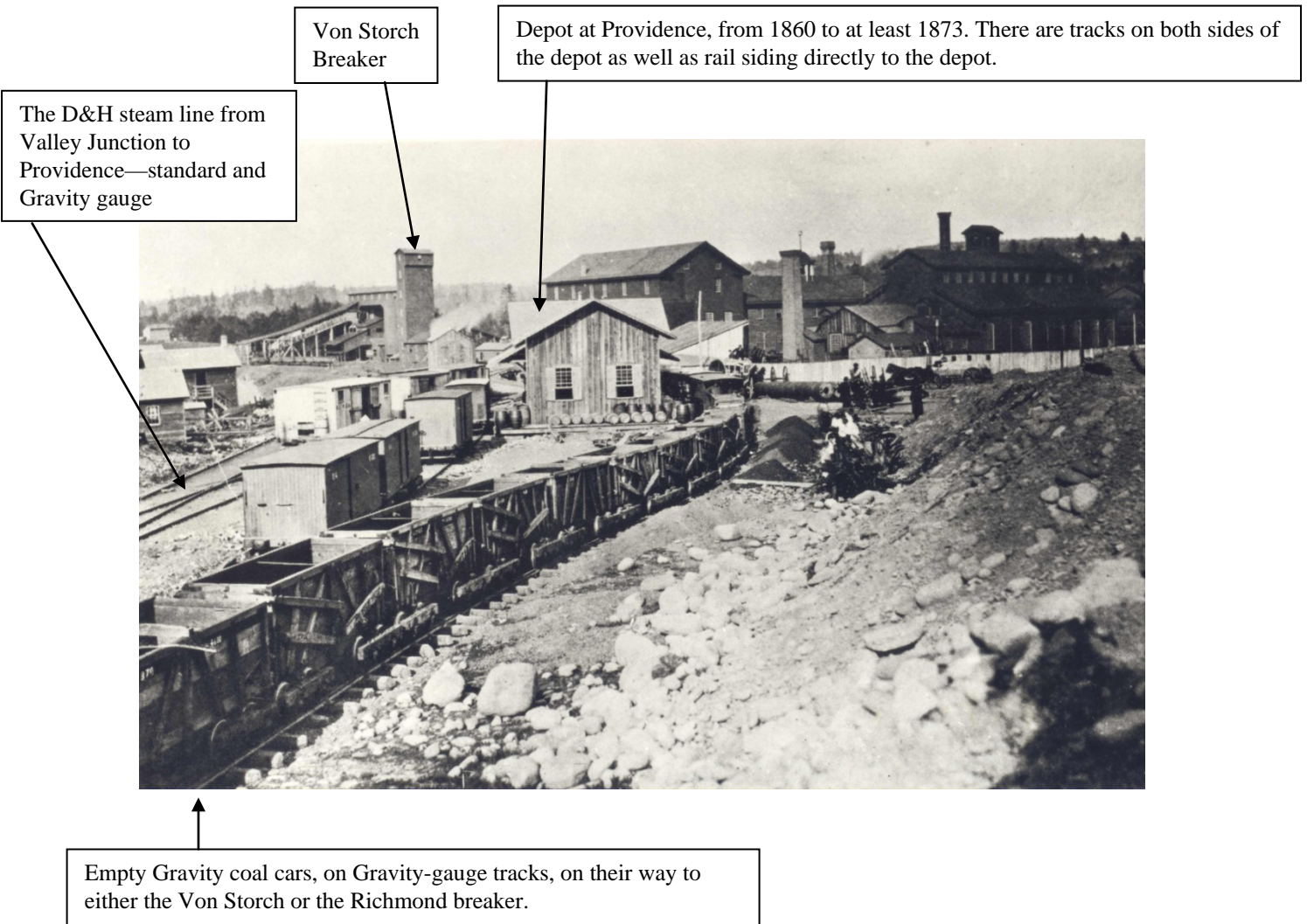
2. Foot of Plane No. 23 to Von Storch and Richmond breakers—Gravity tracks all the way

The southern terminus at Providence of the D&H's 4-mile long Valley Road steam line (but not the southern terminus of the D&H Gravity Railroad line) is shown in the 1860 Johnson photograph that is reproduced below (downloaded from the Internet).

This photograph has been widely reproduced, with technically incorrect identifications given as to the site represented. *Shaughnessy*, p. 55, uses this photo, from the G. M. Best Collection, and identifies the site as the "Scranton Terminal." Yes, but no. The "Scranton Terminal" of the D&H steam line at the time this photo was taken, in 1860, was, in fact, the terminal at *Providence*.

Lowenthal, page 244, uses this photograph, which he reproduces from the collection of the National Canal Museum, with the following caption: "The end of the D&H rail line at Scranton in the 1860s leaves no question about its reason for being." Yes, but no. It's *Providence*, not *Scranton*.

Yes, it's the southern terminus of the D&H 4-mile long steam line at this point, but, no, it's not the southern terminus of the D&H Gravity Railroad line "in the 1860s." Gravity cars went beyond this point to the Von Storch and Richmond breakers. (At a later date, a third rail would be installed in the D&H steam line--the Valley Road--to Green Ridge and then to Wilkes-Barre; see discussion below).



What are we looking at in the photo above? We are looking south at the D&H depot at Providence. The building at the center of the photograph, with the two windows facing the spectator, is the 1860 Providence Depot (served as the site of the Providence depot from 1860 to at least 1873, when the Depot Street facility was opened), around which the track branches. The breaker in the background is the Von Storch breaker, to which there was direct access, via the western branch of the line south of Market Street, known officially as the D&H Von Storch Branch Rail Road (a Gravity-gauge line down from Valley Junction). The empty D&H Gravity Railroad coal cars in this photograph are on their way either to the Von Storch breaker in Providence (mining was underway there by August 1860) or to Richmond & Co.'s shaft and breaker in Dickson City (mining was also underway there by August 1860) to both of which Gravity-gauge tracks were installed by August 1860. This we know from the following notice that was published in the *Carbondale Advance* of August 11, 1860:

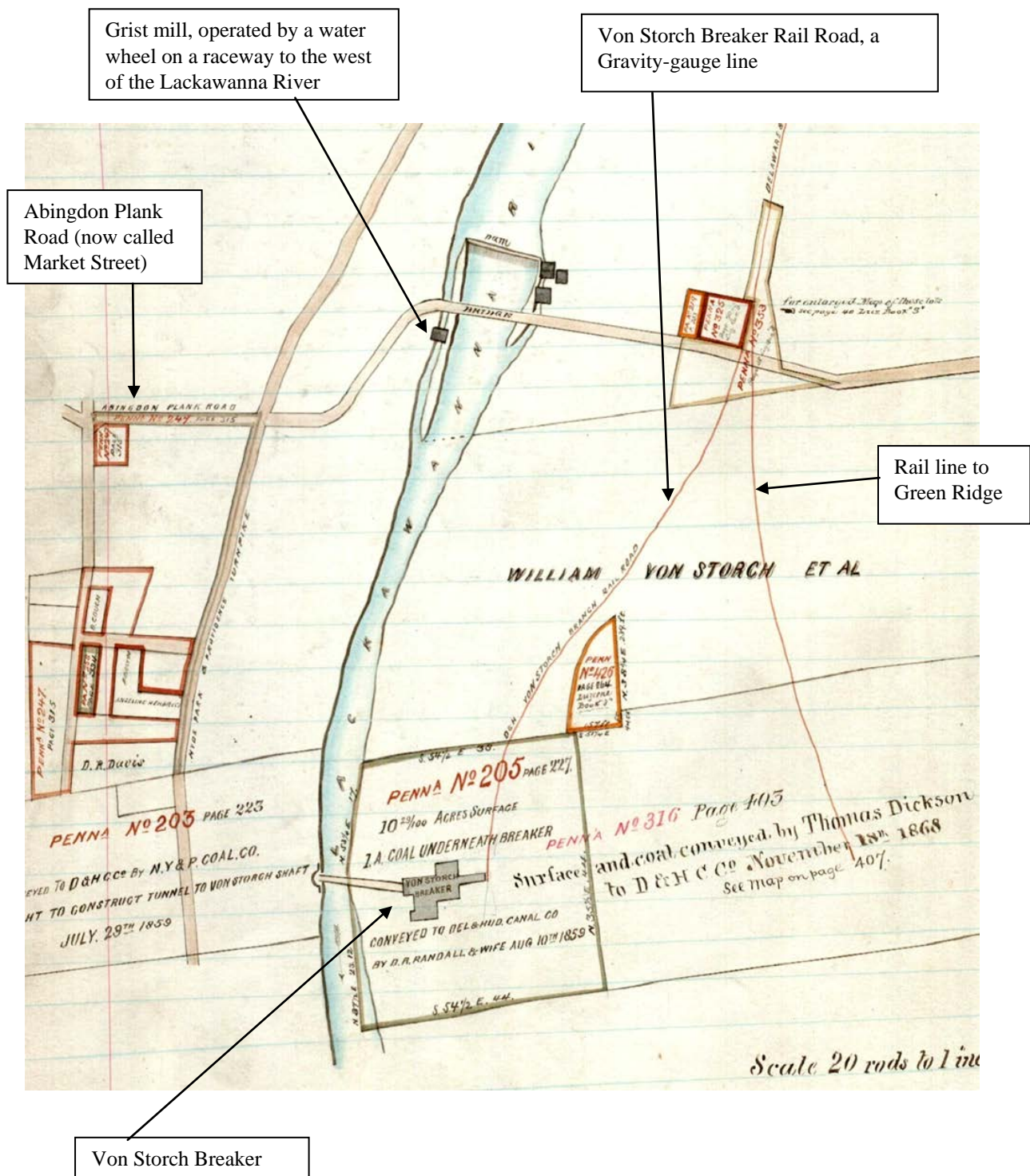
“Our Coal Business. / We are told that mining has commenced at the Vanstorch Shaft in Providence, and at Richmond & Co.’s. Coal is daily forwarded here from both. / Jones & Co. will have their second Breaker ready for use in a few days, when they can forward a considerably increased amount. / Offerman’s Breaker is nearly ready for use. / Brennan’s Railroad and Breaker are also being pushed forward to completion. Coal will soon be furnished from all of these new openings.” (*Carbondale Advance*, August 11, 1860, p. 2) [For number of tons of coal shipped by these companies in 1860, see the report, herein in the “General Overview of Anthracite Mining,” for coal shipped over the D&H in 1860.]

The D&H Von Storch Branch Rail Road

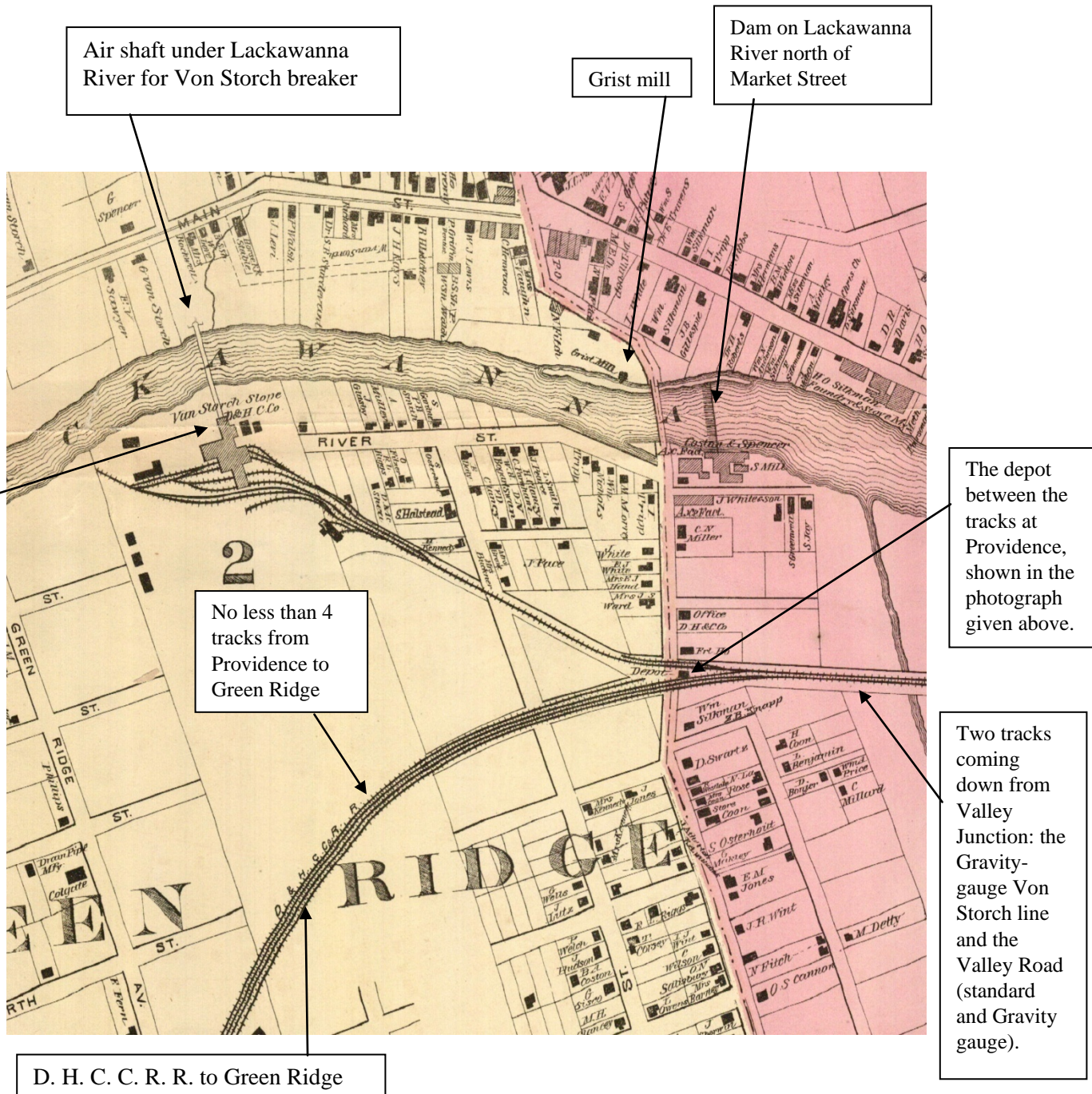
This extension of the Gravity line from Providence to the Von Storch breaker, we learn from *COP*, p. 161, was advocated by George Talbot Olyphant, who was elected president of the D&H on March 15, 1858. "Next, Olyphant persuaded the board to extend the railway from its terminus in the village named for him to what was called the Van Storch property in Providence."

In the D. & H. Deed Book – Luzerne 2, there is a map, p. 226, that illustrates the deed, pp. 227-28, dated August 10, 1859, between David R. Randall and wife and the Delaware & Hudson Canal Company. On that map, the Von Storch Breaker and D&H Von Storch Branch Rail Road in Providence are shown. The street that runs East/West at the top of the map is Market Street. In 1860, the D&H steam line down the valley from Valley Junction to Providence ended at Market Street.

Here is a detail from that map:



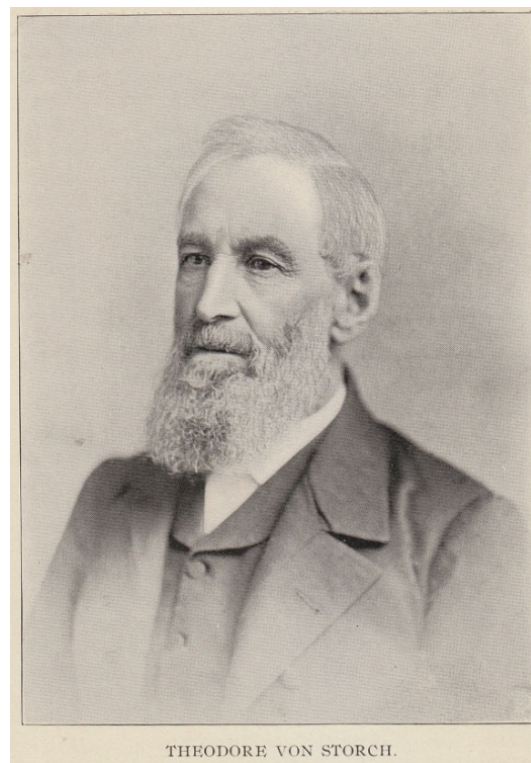
Here is another look at the Von Storch Branch from the 1873 *D. G. Beers* map volume. The 1873 *D. G. Beers* map shown immediately below shows the D&H Depot inside the "Y" and on the north side of Market Street. This was the site of the Providence Depot from 1860 to at least 1873 when the map was drawn. To the west of this depot, and on the north side of Market Street, are two D&H properties. The building on the property nearest to the tracks is identified as "Frt. Ho" (Freight House); the building on the second property is identified as "Office D. H. & C Co" (note the misplaced ampersand on the map).



There is a great deal of information on the Von Storch breaker in the SRP breaker volume (Volume XVIII) in this series and in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897, pp. 1014-16.

Theodore Von Storch: born May 19, 1812; for more than 20 years he was justice of the peace and chief burgess of Providence. "The land which he owned is underlaid with as fine coal deposits as may be found in the valley, and two companies operate it, the Delaware & Hudson Coal Company and the West Ridge Coal Company." He died May 30, 1886.

Here is the likeness of Theodore Von Storch that is given on p. 1014 of *Portrait and Biographical Record of Lackawanna County Pennsylvania*, p. 1014:



Gravity tracks were also laid to the Richmond Breaker. This we know from an undated clipping (probably from the 1890s from the *Carbondale Leader*), titled **"THE DELAWARE & HUDSON RAILROAD. / It Employs 1,200 Men in Carbondale and Disburses over \$300,000 Annually"** in one of the Gritman scrap books in the collection of the Carbondale Historical Society:

“THE DELAWARE & HUDSON RAILROAD, / It Employs 1,200 Men in Carbondale and Disburses over \$300,000 Annually./ The locomotive railroad, of the Delaware & Hudson Canal company, might be said to have had its beginning in February, 1860, when passenger cars were hauled between Olyphant—the terminus of the Gravity road—and Providence, a distance of a little more than three miles. The motive power at first consisted of two horses, driven tandem. After a month or so, the horses were replaced by a locomotive, and the “Major Sykes [D&H No. 1, one of five Gravity steam locomotives; 0-4-0, built for use on Valley Road],” the first locomotive built for the Delaware & Hudson company’s use on this side of the mountain, performed the work. / This engine was built at the Dickson Manufacturing company’s works, Scranton, Pa., in 1860 [No, it was built by W. Cook & Co., Scranton, 1860], to haul coal from Van Storch and Richmond breakers—the only ones then in operation—to the foot of plane 23 Olyphant; Henry Cool, who now runs a locomotive on the New York Central, was the first engineer to work her.”

The exact location of the Richmond breaker in question has not yet been determined. About this breaker, we read the following in the portrait of William H. Richmond that is published in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897, pp. 245-46. On page 246 we read:

"In January, 1860, Mr. Richmond commenced mining anthracite coal near Scranton under the firm name of Richmond & Co., having for partner Charles P. Wurts, late general superintendent of the Delaware & Hudson Canal Company. In 1863 the business was transferred to the Elk Hill Coal & Iron Company, with Mr. Wurts president, Mr. Richmond treasurer and manager. The following year, however, he became the owner of the principal part of the stock, and is now president, treasurer and manager." "On page 245, re read: "The Elk Hill Coal & Iron Company, of which Mr. Richmond is president and treasurer, was incorporated in 1863 and has since become one of the most important industries of the kind in Lackawanna County, operating two collieries, with a capacity for shipment of four to five hundred thousand tons per annum. Richmond Colliery No. 3 is situated at Dickson City, near Scranton [emphasis added], and turns out superior anthracite coal of every size. Richmond Colliery No. 4, about five miles above Carbondale, was built in 1893. . . "

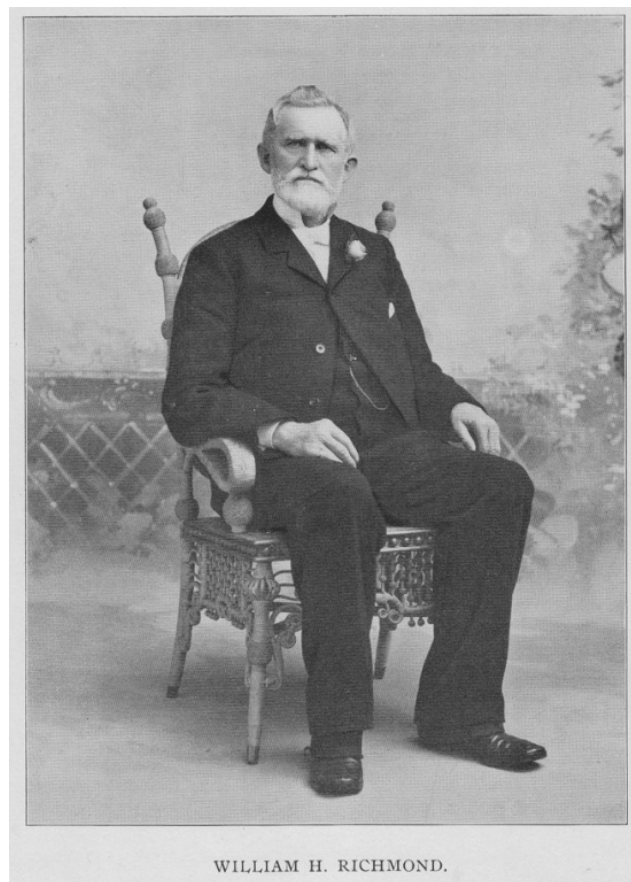
In Volume II of *History of Scranton and the Boroughs of Lackawanna County* (1914) by Frederick L. Hitchcock and John P. Downs, respectively, we read, on pages 355-56, the following about the Richmond colliery in Dickson City:

"Prior to the setting off of Throop in 1894, Dickson City extended northwest and southeast on both sides of the Lackawanna, covering a very large area. But there was little of importance transpiring in the entire borough until Richmond and Chittenden began operations in 1859. The village of Priceville then sprang up around the collieries and several private enterprises were undertaken at what is now Dickson City, the Elk Hill Coal and Iron Company later absorbing

most of the business. The colliery owned by the latter company was built by William H. Richmond & Company in 1859, the breaker, erected in 1860, being the first on the Gravity road between Scranton and Carbondale. Richmond & Company operated the colliery until 1863, when they organized the Elk Hill Coal and Iron Company. . . The borough charter was granted in 1875, a post office having been established a year earlier, with L.E. Judd, postmaster."

It is very interesting to note that W. H. Richmond's business partner in 1860 was none other than Charles Pemberton Wurts.

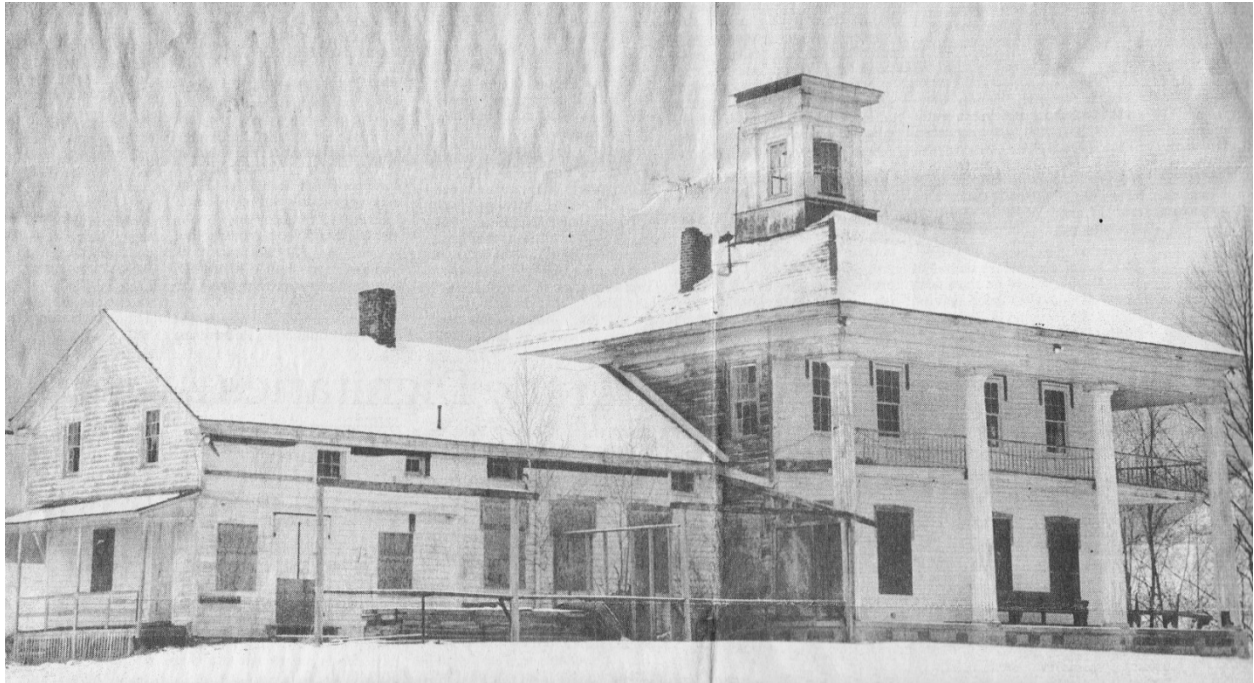
Here is the likeness of William H. Richmond that is given on page 244 in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897:



W. H. Richmond was born in Marlborough, Hartford Count, CT, October 23, 1821. He married Lois R. Morss, and they were the parents of five children, three of whom were girls, all of whom received classical educations at Vassar College.

Lois R. Morss was one of the daughters of George Lord Morss of Simpson, Fell Township, PA. Here is a photograph of the Morss Mansion that was taken by Edward Pikulski of *The Scranton Sunday Times* to accompany the article titled "143-Year-Old Home May Be on Hit List" by

Maureen Manzano that was published in *The Sunday Times* of March 10, 1996:



Morss Mansion, Simpson, PA. Photo in 1996 by Edward Pikulski

More on the Major Sykes, which was the first Gravity steam locomotive to operate between Valley Junction and Providence:

"MAJOR SYKES. / Some Interesting Facts Concerning Carbondale's Oldest Locomotive of Note. / The Carbondale correspondent of the Sunday News yesterday had the following biographical sketch of a familiar yard locomotive of this city which contains some interesting data: / 'An occasional glimpse of the 'Major Sykes' cheers the heart of the older railroad men of the city of Carbondale, who ran trains in days when railroading was railroading. The 'Major Sykes' is one of the oldest engines in possession of the Delaware & Hudson road, and is venerated next to the 'Stourbridge Lion' by railroaders generally. / 'Major Sykes,' which is used now only on occasions of emergency, is the oldest engine in active service on the Delaware and Hudson road. It was purchased of the Union Railroad company way back in the '60's and was used at Plymouth [The Major Sykes collided with D&H engine No. 11 in 1871 and was wrecked. It was re-built in 1872 to 0-6-0]. It was first brought to Carbondale in 1872, and was placed in charge of engineer Starkweather, who was considered the most capable on the Delaware and Hudson road. Starkweather ran the engine successfully for several years. Finally, one morning, word was received that a new double trucker had been completed for the Erie road, down at the Dickson works in Scranton. There was no one in the employ of the road that was considered so competent in handling new locomotives as Starkweather. He was commissioned to take the trip to Scranton and steer the new iron horse to Carbondale. The only thing that made the prospects

of the trip unpleasant was the fact that the engineer would be obliged to be separated for a day from the little engine to which he had become so warmly attached. / 'Good bye, old boy,' said he on the morning of the departure for Scranton. 'Wait for me on the siding.' / Starkweather, accompanied by a trusty fireman, went to Scranton and in a few hours after their arrival were steaming towards home in the cab of a new locomotive. As they neared Olyphant, Starkweather suddenly leaned against the cab window and a deathly pallor spread over his face as his hand loosened its grip on the throttle. The fireman noticed his illness at once and placed one arm around the sick man while with the other he grasped the guiding rein of the iron horse and spurred it to greater efforts. The track was clear and the engine fairly flew as the fireman opened the valve in his desire to reach medical aid for his associate as soon as possible. But all in vain. As the giant locomotive thundered through Mayfield, the dying engineer ceased to breathe. The 'Major Sykes' waited on the siding as the big locomotive steamed into Carbondale, but the happy engineer of the morning knew it not. The hand that had guided the little engine up and down the valley on many a bright morning in days of yore was cold as death. / After the death of Starkweather the 'Major Sykes' was placed in charge of Bill Blake, who pulled the throttle for five years. E. Williams acted as fireman and Bill Geary was conductor. Blake relinquished the machine in 1881 to take charge of No. 23 on the main line. Levi Slocum then ran the engine three years and was succeeded by Oscar Histed. In 1887, Histed was transferred to a passenger engine. Anse Bailey and W. Williams followed in order on the 'Major Sykes,' which was made a switch engine in the yards. The old engine has recently been retired [09-01-1889] and is now used only on occasions of emergency when an engine is required to rescue stranded trains on the gravity road. The 'Major Sykes' is one of the objects of interest along the Delaware and Hudson railroad, and visitors to Honesdale and other points of note on the line of the Delaware and Hudson never feel that a trip is complete unless they have had a view of the famous 'Major Sykes.' / In addition to the foregoing who have handled the throttle of the veteran iron steed, they may be mentioned Boddy Campbell, who guided it for a long time after returning from the war, where he had made a brilliant military record. He was succeeded by Alex Copeland, who is now recognized as one of the most competent passenger engineers in the United States. James Gallagher, also bears the distinction of being one of the 'Major's' proud and competent directors. It is said that the height of the late John Tracy's ambition was to become the engineer of this famous but not [perhaps "now"] superannuated drawer of coal, freight cars and cabooses." (*Carbondale Leader*, December 13, 1897)]

The Major Sykes in an accident at the Coal Pockets:

"Last Saturday, as the D. & H. engine Major Sykes was backing slowly down past the Coal Pockets, an accident occurred which almost terminated in the death of two men. The wind was blowing very stiff and lifted one of the swinging chutes from its grappling, so that it fell in such a shape as to catch the cab of the locomotive, and in an instant the woodwork was badly smashed. The fireman, whose name is Cawley, was injured, and the engineer, James Gallagher, was just permitted to escape with a bad scare. Had the engine been running faster it would have been the cause of death to the three men who at that time were on the engine." (*Carbondale Advance*, April 1, 1876, p. 3)

The Major Sykes was put into service elsewhere on the Gravity Railroad in emergency situations: pulling passenger trains from No. 5 to No. 20 in 1884:

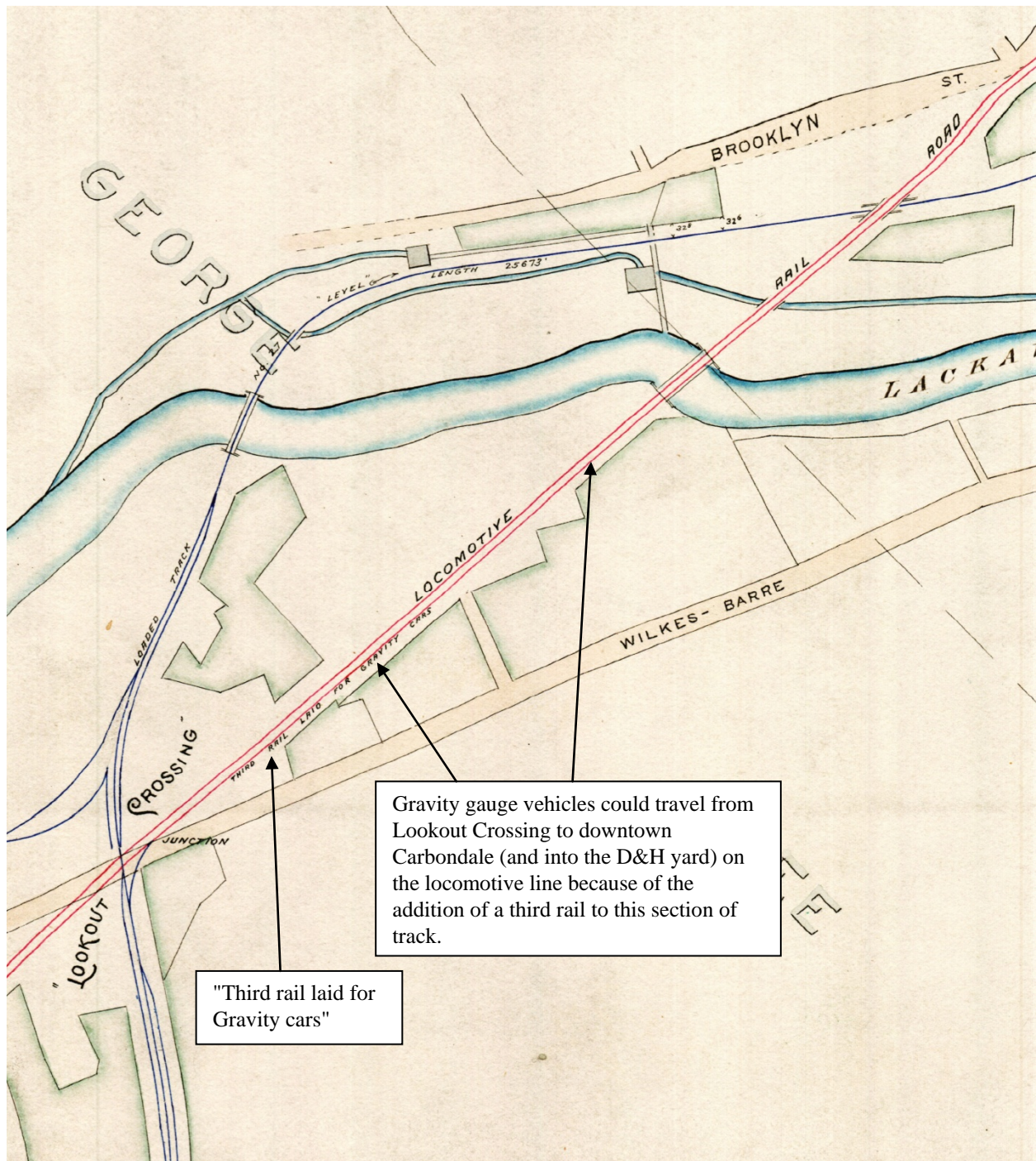
"No. 8 was a busy place last week, the old boilers having played out. A large force of men were at work putting in new ones. The passenger trains were pulled from No. 5 to No. 20* with the Major Sykes, O. Histed engineer, and Morris Bunnell fireman. No. 8 was doing quite well yesterday with four boilers, four more are to be put in as soon as possible." (*Carbondale Leader*, December 30, 1884, p. 1)

*The passenger trains were taken up to Level No. 5 and then switched to the light track and then pulled up the light track to No. 20, and then sent on their way to Honesdale.

And then again, when the D&H inaugurated passenger service on the Gravity line between Carbondale and Honesdale in 1877, the Major Sykes was used again. In the article titled "Our Own 'Gravity Road' " (*The Delaware and Hudson Company Bulletin*, July 15, 1925, pp. 10-11), on the question of the passenger coaches themselves and their movement out of Carbondale, via Plane No. 1, and back into Carbondale, via Lookout Junction, we read:

"The first passenger coaches were built with an enclosed section in the middle and an open section, with seats running lengthwise, on the ends. Later a standard type of coach was used, excepting that the width of the cars only permitted double seats on one side, a single seat being on the opposite side of the aisle. Open cars were used during the summer months. A regular train, in the summer, consisted of a baggage car at the head end, a closed coach and two open cars. The trains were controlled by hand brakes and the head brakeman rode on the front platform and rang a gong when approaching crossings. Access to the open cars was by a running board along each side at the floor level and, for stations where there was no high platform, it was necessary to use a short ladder to assist passengers on and off. / The scheduled time of the passenger trains from Carbondale to Honesdale was one hour and fifteen minutes, the return trip taking about ten minutes longer. The passenger trains started from the old Union Station at Dundaff and were pulled up backwards over the 'back' Davis plane to a switchback at the head, thence moving by gravity over the 'high works,' a long trestle crossing the locomotive tracks and a portion of Carbondale, to the foot of Number One Plane. On the return trip the trains stopped at Lookout Junction where they were met by the narrow gauge locomotive 'Major Sykes' and pulled into the Carbondale station." [emphasis added] (Our Own 'Gravity Road,' *The Delaware and Hudson Company Bulletin*, July 15, 1925, pp. 10-11)

This section of trackage between Lookout Junction (called "Lookout Crossing" in the 1895 Gravity map volume) and downtown Carbondale (with a third rail for Gravity cars) is shown on the detail given below from the 1895 Gravity Railroad map volume:



Oscar E. Histed, as we learned from the clipping given above from the *Carbondale Leader*, of December 30, 1884, p. 1, was the engineer at the throttle of the Major Sykes in 1884. Many interesting details about the man and his family are reported in the biographical portrait of him that is given in *Portrait and Biographical Records of Lackawanna County, Pennsylvania*, pp. 307-308. Here is that portrait:

"OSCAR E. HISTED, locomotive engineer on the Delaware & Hudson Railroad and a resident of Carbondale since December of 1869, was born in Waymart, Pa., February 18, 1853, and is the next to the eldest son of Stephen and Adelia (Bunnell) Histed. His father, who was born near Honesdale, has always resided in this part of Pennsylvania, and for the past forty-three years has occupied the same house in Waymart. His [the father] tenure of employment with the Delaware & Hudson Canal Company covers a period of more than fifty years, and at this writing he is stationary engineer on the Gravity road. He is an energetic, hard-working man, faithful to his employers and showing the utmost fidelity to their interest. Their appreciation of his merits is proved by his long service with them. His wife died in 1865. / The family of which our subject is a member consists, besides himself, of two sons and two daughters, namely: William, a conductor on the Delaware & Hudson road; Andrew, who was employed as a locomotive engineer, and was killed in an accident on the road; Sarah, wife of Boyd Case, a conductor; and Hortense, who married Thomas Cooper, employed on the Gravity road. In early boyhood our subject was the recipient of fair educational advantages. When sixteen years of age he came to Carbondale and began to work for the Delaware & Hudson Canal Company on the Gravity road. Since that time has been continuously in the service of the company. As soon as the steam road was built he was transferred to the Scranton Division, and has since become known as a trustworthy and reliable engineer. Among his characteristics are thrift and energy, inherited from his German forefathers, and steadfast determination, the gift of his English ancestors. / Mrs. Histed was in maidenhood Mary Wyllie, her father, Andrew Wyllie, being a resident of Carbondale. . . They and their children, Belle, Laura, Raymond and Marjorie, reside at No. 30 Belmont Street. Mr. Histed also owns the lot adjoining, and expects soon to build there a fine residence for his family. A Republican in political views, he has taken an active part in local matters in past years. He has served as chairman of the common council and has represented his ward in the select council, in both positions devoting himself to the interests of the people. Identified with the Brotherhood of Locomotive Engineers, he has filled all the offices of the lodge to which he belongs. Fraternally he has filled all of the offices of the subordinate lodge and is now past grand. Since 1882, he has belonged to the encampment, and for some time has held the responsible position of district deputy grand master for Lackawanna District No. 1."

Gravity-gauge D&H Steam Locomotives:

See section 1902 (the First Sixty D&H Locomotives) in Volume XV in this series.

There were five of them, the first four of which (*Major Sykes*, *C. P. Wurts*, *Honesdale*, *Lackawanna*) saw service, for varying periods of time, at the foot of Plane 23 in Olyphant. Two of these engines (*Honesdale* and *Lackawanna*) were used on the level ground at the head of the D&H Canal in Honesdale. This is an interesting transitional development in railroad technology: Gravity-gauge tracks, not on inclined planes or levels but on flat ground. Cars moved by a Gravity-gauge steam locomotive.

1. D&H Engine No. 1: *Major Sykes*: 0-4-0, built in 1860 by W. Cook & Co., Scranton. Valley Road Summary: ". . . the first locomotive built for the Delaware & Hudson company's use on this side [the West] side of the mountain. . . This engine was built . . . to haul coal from the Von Storch and Richmond breakers—the only ones then in operation—to the foot of plane 23, Olyphant. Henry Cool, who now runs a locomotive on the New York Central, was the first engineer to work her."

Major Sykes

Origin of the name of the first named D&H locomotive: Possibly because of the family connection, through marriage, between the Wurts family and the Sykes family? Eliza Ann Wurts (1802-1881), a daughter of George and Abigail Petit Wurts (George was a brother of Maurice and William Wurts, founding fathers of Carbondale) married, in 1831, Lorenzo A. Sykes (1805-1878). Sykes was a civil engineer and ultimately became the chief engineer of the Morris Canal. He worked for the D&H, beginning about 1850, and was appointed, in 1855, general agent/superintendent. He resigned from the D&H in 1866. He died in Orange, NJ, where the family settled in 1875.

The Major Sykes and the C. P. Wurts were purchased by the D&H in 1860, both built by W. Cook and Company, Scranton.

Photo from *Railroadians*. . . , p. 25:

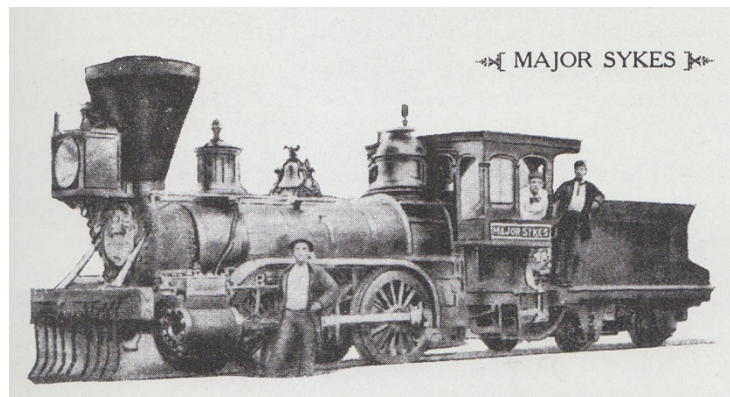
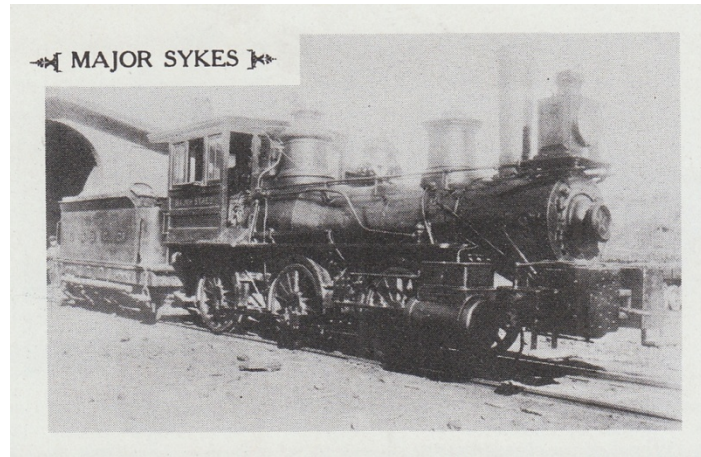
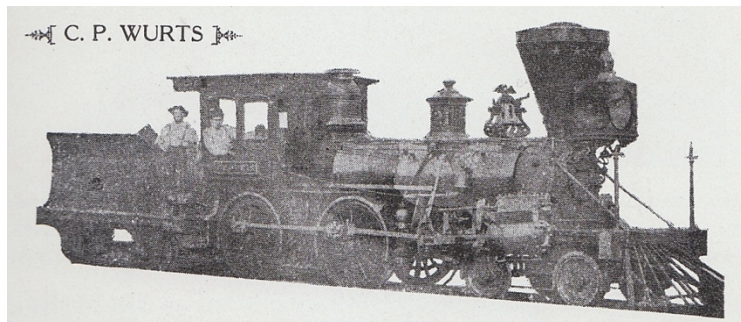


Photo from *Railroadians*. . . , p. 39: The Major Sykes was rebuilt/converted by the D&H in 1872 at the Green Ridge Shop, changing in type from 0-4-0 to 0-6-0, "probably the first conversion."



2. D&H Engine No. 2: *C. P. Wurts*: 4-4-0, built in 1860 by W. Cook & Co., Scranton. Sold to the Dickson Locomotive Works in 1874. Valley Road Summary: ". . . [*C. P. Wurts*] built for passenger service, though she too hauled coal to the foot of No. 23 when necessary."

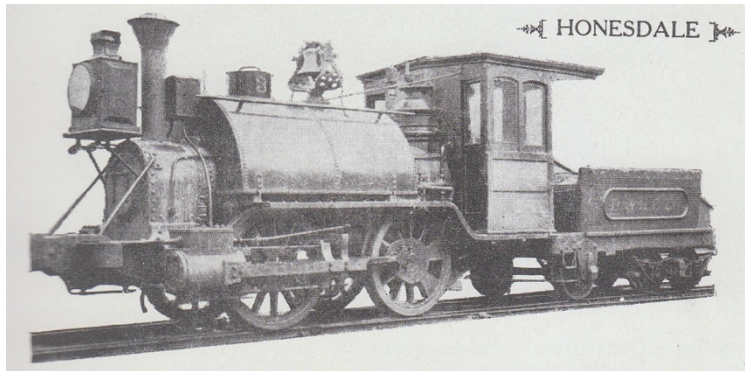


3. D&H Engine No. 3: *Terrapin* (name later changed to *Col. Ellsworth*, then to *Fire Plume*, then to *Honesdale*), 0-4-0, built in 1861 by W. Cook & Co., Scranton. Retired 1899. Valley Road Summary: ". . . [*Honesdale*] now doing duty on the company's docks in Honesdale. . . She was too small for the work at Olyphant, and was kept there only a short time."

Honesdale

0-4-0 type, built by W. Cook and Company, Scranton, in 1861. This particular locomotive had three names, the 'Terrapin,' 'Fine Plume' and 'Honesdale.'

Photo from *Railroadians*. . . , p. 31:



The above photo of the *Honesdale* was downloaded from a John V. Buberniak e-mail to the author. The *Honesdale* is said to be seen here at the canal basin in Honesdale.

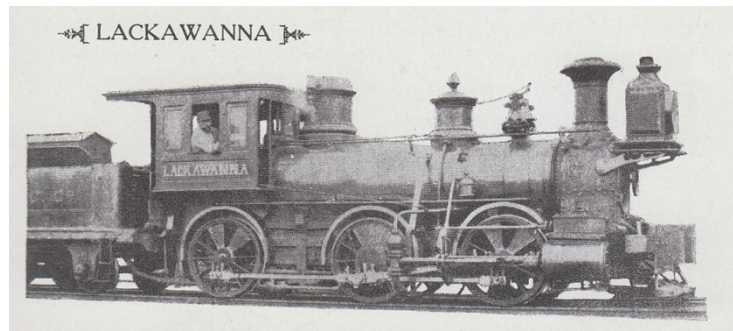


4. D&H Engine No. 4: *Lackawanna*: 0-6-0, built in 1862 by the Dickson Locomotive Works, scrapped in 1899. Valley Road Summary: ". . . [*Lackawanna*] built for use between Olyphant and the mines. She also was sent to Honesdale, and is still there. All of the engines built prior to the extension of the [D&H] line to Vine Street, Scranton, in 1863, were transported from the Dickson works to Providence on heavy wagons, drawn by horses and mules."

D&H Engine No. 4, Lackawanna:

"Coal was unloaded all winter long [at Honesdale] on the 'contract,' as the hillside above the canal basin was called, to be reloaded during the summer and hauled to the docks from whence it was shipped to market in canal boats. / It was during his time [Howard Fitch, late 1860s and early 1870s] that the locomotive *Lackawanna*, No. 4, was taken to Honesdale for use in handling the coal between the storage piles and the transfer pockets in the north end of the yard, a distance of about a half-mile. David McDermott was the engineer. The engine was a hard coal burner and was used only in summer, being taken back to Carbondale each fall before winter weather set in. . . " When the Gravity Railroad was closed, Howard Fitch was working as the engineer at No. 15, at Prompton, on the light track. (Biographical portrait of Howard Fitch, pp. 279-280, *The Delaware and Hudson Company Bulletin*, September 15, 1927)

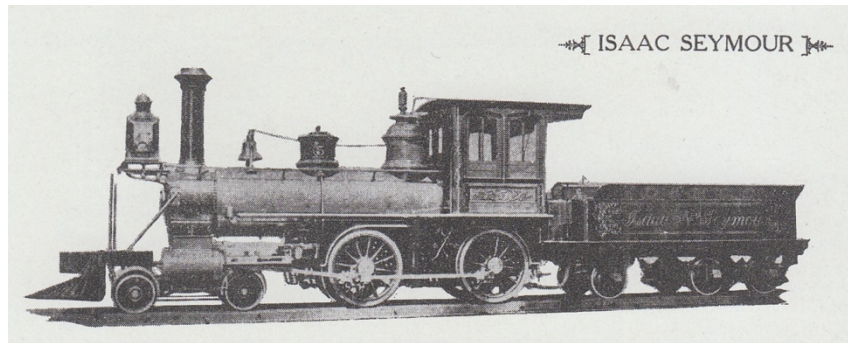
Photo from *Railroadians*. . . , p. 31:



The Lackawanna was built by the Dickson Manufacturing Company, March 31, 1862, serial number 'O,' type 0-6-0, having twelve by eighteen inch cylinders, forty-two inch drivers, fuel being anthracite. Boiler diameter was thirty-six inches. Total weight of engine was forty-two thousands pounds.

5. D&H Engine No. 5: *I. N. Seymour*: 4-4-0, built by the New Jersey Locomotive and Machine Co. in 1866. Blew up on March 10, 1879 in the Carbondale Roundhouse; sold to the Dickson Locomotive Works. Valley Road Summary: "On Sunday, August 4th, 1866, engine no. 5, named 'I. N. Seymour,' was delivered to the Delaware & Hudson by the Grant locomotive Works, Paterson, N. J.; she blew up in the Carbondale roundhouse in 1876. A locomotive at the time, cost from \$13,000 to \$18,000."

No. 5 was the *I. N. Seymour*, built in 1866 by the New Jersey Locomotive and Machine Company, Patterson, NJ.]



Note:

In the D&H list of the first sixty D&H steam locomotives, No. 5 is given as S. A. McMullen. Is that correct?

6801.3

3. Providence to Green Ridge and Vine Street (passengers)—third rail installed in steam line

To begin, we should have a look at the following article, in which Dr. Hollister speaks of travel in the early days between Scranton and Carbondale:

In an article titled "**TRAVEL IN THE EARLY DAYS.** / How the Means of Passenger Transportation Has Changed in the Last Forty Years—The 'String of Beans' " (*Carbondale Leader*, February 5, 1887, p. 4), we read:

"In the Scranton 'Truth' of Saturday, Dr. H. H. Hollister, of Providence, one of the oldest men in this valley and its accredited historian, gives an interesting account of the means of travel in the days of '45 and thereabouts. From it we [the *Carbondale Leader*] take the following: / . . . In the original charter of the Delaware and Hudson Canal Company passenger traffic was neither forbidden nor implied. The movement of coal toward the seaboard with miscellaneous returning freight was its only aim. The old red stage coach, driven for a quarter of a century by the Kenners, and making its way along the valley and over the hills from Scranton to Carbondale less than thirty years ago with sun dial correctness, vanished in 1860. In the summer of that year, Thomas Dickson, then Superintendent of the Valley Gravity Road, seeing the increasing travel

between these islands cities conceived the idea of putting a passenger train upon it. He had three cars built, narrow and small, hired a conductor named Decker to run them a few times over the road in order to ascertain their speed and make a time table. This train in derision, was called the 'string of beans,' with a seat upon each side of the car, too diminutive for a tall passenger to stand erect. It first ran to Peckville, from whence passengers proceeded by stage. When the bridge across the Lackawanna, at Peckville, was completed, the cars ran to Olyphant and after a few weeks delay they moved to the lower end of the village of Price in the meadow on the farm of William Vaughan. The cars were drawn by a horse from Plane G. Here the cars were met by a stage and a bus. When the track was laid to Capouse, in Providence, two rival buses were on hand and they carried passengers to and from Scranton for twenty-five cents. When Bayard Taylor lectured in Scranton in 1860 he took this route to Carbondale. After the erection of the bridge at Providence, the East Market road was for years the western terminus of the road. April 17, 1860, the following railroad notice appeared: / 'The Carbondale and Providence passenger trains, until further notice, will run as follows: Leave Carbondale at 6:00 and 8:30 a.m. 2:00 p.m. returning leave Providence at 8:15 a.m. 11 a.m. 4:40 p.m. Omnibuses will be waiting for the conveyance of passengers to and from the trains upon the Del., Lack. and Western and Bloomsburg Railroads. / C. P. WURTS / Supt. D. & H. C. Co.' / Today [1887] six first class passenger trains run daily between Carbondale and Scranton, carrying at least five hundred passengers daily, while the old stage of forty years ago carried three or four passengers every other day. What a change!"

Carbondale to Scranton by rail:

Initially, it was Carbondale to Peckville by rail, then stagecoach.

"When the bridge across the Lackawanna, at Peckville, was completed, the cars ran to Olyphant and after a few weeks delay they moved to the lower end of the village of Price in the meadow on the farm of William Vaughan. The cars were drawn by a horse from Plane G. Here the cars were met by a stage and a bus. When the track was laid to Capouse, in Providence, two rival buses were on hand and they carried passengers to and from Scranton for twenty-five cents. After the erection of the bridge at Providence, the East Market road was for years the western terminus of the road. " (*Hollister*, see article above).

What do we know about the first passenger cars on this line?

Thomas Dickson had three passenger cars built, narrow and small, with a seat upon each side of the car. The cars were too diminutive for a tall passenger to stand erect in them. He hired a conductor named Decker to run them. This train, in derision, was called the 'string of beans.'

A rail connection between the foot of Plane G and Providence/East Market Street had not yet been made in November 1859, when "a party of our people [from Carbondale] were favored with a ride upon the extension of the Company's Railroad to the new village of Olyphant."

In the November 12, 1859 issue of the *Carbondale Advance*, we read:

“Railroad Communication. / We understand a party of our people were favored with a ride upon the extension of the Company’s Railroad to the new village of Olyphant. A more general party took a similar excursion of Wednesday, and on Thursday another, including all that had notice, leisure and inclination for the trip. A comfortable passenger car has been provided, well seated, and the trip we learn is made very safely and pleasantly in less than hour. Regular trips are not proposed to be made at present, but will probably [be made] within a few months [when] the further extension of the road to Providence is completed. This will bring us by Railroad within 2 ½ miles of the Scranton Depot. It will be a great point gained, but not quite all that is desirable. / There seems to be no chance for but one opinion in regard to the Railroad as it now is, in its whole extent from Honesdale to Olyphant. It is a very superior road—wisely planned and substantially constructed. Its arrangements, and appointments for business are every way excellent, and its capacity is undoubtedly equal to 6,000 or 8,000 tons per day. / With such a road, and the large quantities of coal secured, of a quality equal to the best Anthracite in Pennsylvania, the basis seems to be laid for a large and prosperous business for at least a century.” (*Carbondale Advance*, November 12, 1859, p. 2)

In 1859 the D. & H. made their first attempt at establishing a passenger service between Carbondale and Olyphant/Plane No. 23 over their newly constructed railroad. Once a day, a passenger car was attached to a freight car which had been fitted up with a door at each end. Small single pane windows at the sides furnished light and ventilation. The venture was liberally patronized. Cars of better type were soon designed and put in service. (In 1864, there were three cars per day; no Sunday service; 5,000 passengers per month were transported.)

The passenger service to Olyphant was an immediate hit with the public:

“The Car.—The Passenger Car to Olyphant has made regular trips throughout the week, running generally with full loads each way. It seems to be a popular institution, and bids fare to be a permanent one. The extension of the Road to Providence, and the large population setting along the line from Carbondale down, will make some cheap mode of transit to and from this place indispensable.” (*Carbondale Advance*, November 19, 1859, p. 2)

Passenger cars left Carbondale, up to at least 1868, by being taken up the Blakely Plane, and then continuing on their journey southward to Plane 21 in Archbald and then on down to the foot of Plane 23. After February 1860, when the rail line was extended from the foot of Plane 23 to Providence, the passenger cars traveled the short distance from the foot of Plane 23 to Valley Junction on Gravity tracks. At Valley Junction they were moved onto the Valley Road, in which a third rail was installed. They then were moved by a Gravity steam locomotive to Providence (later to Green Ridge and Vine Street). Returning to Carbondale, they were brought to the top of the mountain at Archbald and then sent down Level 27 to downtown Carbondale.

Note: When the steam line between Valley Junction and Providence was opened initially, as we have noted above, the motive power at first consisted of two horses, driven tandem. After a month or so, the horses were replaced by a locomotive, the "Major Sykes [D&H No. 1, one of five Gravity steam locomotives; 0-4-0, built for use on Valley Road], the first locomotive built for the Delaware & Hudson company's use on this side of the mountain. By 1864, three cars per day (none on Sunday) made the trip down to Providence, transporting 5,000 passengers per month.

Rail line to Providence to be completed in January 1860:

"Travel and Mails. / There has been some confusion here during the last ten days in regard to travel and mails down the valley to Scranton. We seem to be just now in a sort of transition state between coach and car, plank road and railroad. We have a communication [by rail] once a day instead of twice [by coach] as heretofore, by the old stage line through which Messrs. Bronson & Allen have served us so comfortably and regularly during many years, and twice a day by railroad to Olyphant, and Omnibus thence to Scranton. / The completion of the extension of the railroad to Providence, which will occur probably during the present month, will thenceforward give the [railroad] cars a decided advantage in time over any other mode of transit to Scranton. Some slight changes and connecting links, made at a small expense, would give us that grand desideratum, a locomotive connection. That is what we want and hope for." (*Carbondale Advance*, January 7, 1860, p. 2)

Farewell to the Stage Coach: Enter the Railroad:

"The Stage Coach. / We mentioned last week that Messrs. Bronson and Allen had drawn off their Coaches from the Valley route. We feel that this is not a common place news item, but an index of an important change that has come upon us. The revolution in the mode of travel which has been going on through the country for some years has finally arrived at our doors, and is destined to obliterate the old land marks. / 'The old Stage Coach' has been so long associated with all our ideas of traveling that it seems like parting with an old friend. It was, too, an accommodating friend. It took us up at our own doors, and there safely left us on our return. It did not whirl us off at a rate of twenty or thirty miles an hour, as if in a hurry to get us away from home and anxious to get rid of us, but took us easily and gracefully some four or five miles an hour, which used to be thought quite fast enough for *steady* people to travel.—But it will not do for this fast age. Other people travel faster, and it will not answer to have them get ahead of us. We must progress until we can keep time with the fastest of them. We must keep up with the age. We must dash through to New York and Philadelphia in the time we used to spend very pleasantly in going to Wilkesbarre, without the least idea that we had been loitering, or suspecting that we had spent a day doing what we sho'd have accomplished in one hour. Those old days of quiet action, enjoyment and leisure are gone, and we, Rip Vanwinkle like, must wake up. And let it be understood that we are waking up and about to do our part in energetic action. If we have to part with old friends, we will gratefully acknowledge past favors, assure them of our best wishes for the future, and take our place resolutely among the wide awake actors of 1860." (*Carbondale Advance*, January 28, 1860, p. 2)

Standard-gauge line from Olyphant to Providence completed by February 1860:

By February 1860, the D&H Gravity Railroad from Carbondale to Olyphant was connected to the D&H's 4-mile steam locomotive rail line between Valley Junction and Providence. It was D&H Chief Engineer Charles P. Wurts, it should be noted, who oversaw the building of the four-mile standard gauge railroad between Providence and the western terminus of the Gravity Railroad at Valley Junction.

Temporary interruption in passenger service:

"THE PASSENGER TRAINS on the Del. and Hudson Canal Co.'s Railroad, running between here and Providence, will be *taken off* next week. This is necessary to some repairs, &c., intended to be made by the Company upon the road and engines. The interruption will be but for a few days, during which the Omnibus Lines will accommodate the travel between this place and Scranton." (*Carbondale Advance*, February 7, 1860, p. 2)

Passenger cars popular with the public:

"**The Passenger Cars.** 'Our Passenger Cars,' or the Passenger Cars now run on the Del. & Hud. Canal Co.'s Railroad to Providence, within two and one-half miles of Scranton, have become an established and highly popular institution. They far exceed the most sanguine anticipations. The trip to Providence is a pleasure. The cars are elegant and comfortable, well cushioned and well warmed, and they run by gravity on fair locomotive time. The mails reach us in about one and a half hours from Scranton, and passengers arrive in good spirits, full of praises for the cars. / Depots are about being built here, and every disposition is manifested to provide fully for the convenience of freight and travel." (*Carbondale Advance*, February 18, 1860, p. 2)

New Omnibus for passenger service to and from the Gravity Depot in Carbondale:

"**New Omnibus.** We have another gratifying improvement to chronicle in the new Omnibus obtained by our enterprising townsman, A. B. Durfee, to run to and from the [Gravity] Depot, connecting with the Passenger Cars [to Providence]. It is well built and elegant, ingress and egress easy, and we hope may always run well filled." (*Carbondale Advance*, April 7, 1860, p. 2)

Regular passenger service between Carbondale and Providence, April 1860:

"The Passenger Cars are again running regularly between this place [Carbondale] and Providence. These cars are a great convenience and promise to be one of the fixed institutions of this locality. We think the grade movement [i.e., gravity movement by means of inclined planes and levels] preferable to the locomotive for roads in hilly countries—less liable to accident, and less dangerous if accidents should occur. The speed on this road is over one-half the average of locomotive roads, which is fast enough for roads of its length, and for all practical purposes." (*Carbondale Advance*, April 21, 1860, p. 2)

Unparalleled growth in the upper Lackawanna Valley, May 1860:

"The growth of the upper portion of the Lackawanna Valley. Is probably unparalleled in the State. Much as we knew it, it even surprised us while passing down on our trip to Wilkesbarre. Olyphant—about one year old—is a large, thriving, and still growing town—and similar villages are starting up at many other points." (*Carbondale Advance*, May 12, 1860, p. 2)

Two round trips to Providence daily from Carbondale, with omnibus service from Providence to Scranton, and comprehensive omnibus service in Carbondale, July 1860:

Three months later (July 1860), the number of round trip trains (Carbondale/Providence) has been reduced to two, with omnibuses available for passenger use both at Providence and at Carbondale. The omnibuses at Providence will take passengers to downtown Scranton, where they may connect with DL&W and L&B trains. An important service addition at this time is the addition of omnibus service at Carbondale, both to and from the station: an omnibus will depart from the Harrison House for the train station for both departing trains to the south; an omnibus will meet both trains from the south "to convey passengers to any part of the city."

Very nice passenger amenities, both in Providence/Scranton and in Carbondale.

Carbondale Advance, July 28, 1860, p. 4: two passenger trains each way between Carbondale and Providence

CHANGE OF TIME.



THE CARBONDALE & PROVIDENCE PASSENGER TRAINS.

ON AND AFTER MONDAY, JULY 16th, Trains will be run as follows:—

Leave CARBONDALE, at.....7 30 A. M.
“ “ “2 00 P. M.

RETURNING,

Leave PROVIDENCE at.....10 05 A. M.
“ “ 5 00 P. M.

O m n i b u s e s

Will be in waiting for the conveyance of Passengers between Providence and Scranton, at which latter point connections will be made with the trains upon the D. L. & W. and L. & B. Railroads for New York, Wilkesbarre and Great Bend.

An OMNIBUS will leave the Harrison House in Carbondale at 7.15 A. M. and at 1.45 P. M., for the Cars, and will be in waiting upon the arrival of the trains to convey passengers to any part of the City.

C. P. WURTS,

Supt. D. & H. C. Co.

OFFICE OF THE DEL. & HUD. C. Co., {
Carbondale, July 21, 1860. }

Seven months later, February 1861: two trains each way daily, between Carbondale and Providence.

Carbondale Advance, February 23, 1861, p. 3

D. & H. C. Co.'s R. R.

**Carbondale and Providence Passenger
Trains.**

OFFICE OF THE DEL. & HUDSON CANAL CO., }
Carbondale, Pa., January 9th, 1861. }

UNTIL FURTHER NOTICE, the Trains on the
Del. & Hud. Rail Road will run as follows:

Leave Carbondale for Providence and Scranton at..... 7.45 A. M.

And at..... 2.30 P. M.

Leave Scranton for Carbondale at... 9.47 A. M.

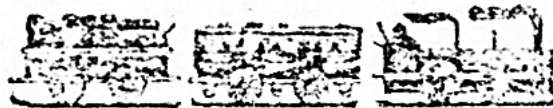
And at 4.20 P. M.

C. P. WURTS, Sup^y

June 1861: changes in train times between Carbondale and Providence; still two trains each way, daily.

Carbondale Advance, June 29, 1861, p. 3

CHANGE OF TIME.



THE CARBONDALE & PROVIDENCE PASSENGER TRAINS.

ON AND AFTER THURSDAY, JUNE 13, Trains will be run as follows:—

Leave CARBONDALE, at.....7 15 A. M.
" " ".....1 30 P. M.

RETURNING,

Leave PROVIDENCE at.....9 55 A. M.
" " ".....4 15 P. M.

O m n i b u s e s.

Will be in waiting for the conveyance of Passengers between Providence and Scranton, at which latter point connections will be made with the trains upon the D. L. & W. and L. & B. Railroads for New York, Wilkesbarre and Great Bend.

An OMNIBUS will leave the Harrison House in Carbondale at 7.00 A. M. and at 1.00 P. M., for the Cars, and will be in waiting upon the arrival of the trains to convey passengers to any part of the City.

C. P. WURTS,

Supt. D. & H. C. Co.

OFFICE OF THE DEL. & HUD. C. Co., }
Carbondale, June 10, 1861. }

C. P. Wurts, the showman: Promoting Travel Up and Down the Valley via the D&H:

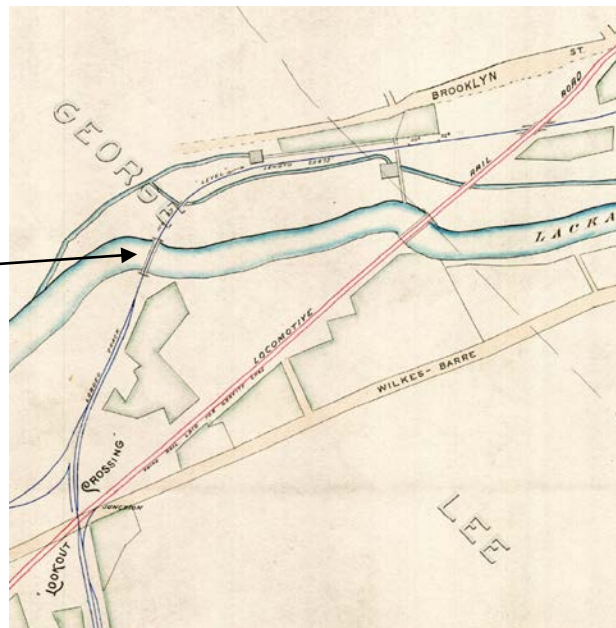
In the December 14, 1861 issue, p. 2, of the *Carbondale Advance* we read:

"Distinguished Visitor. / New Era. / Yes, reader! An Iron Horse has actually run into our City, puffing and snorting, and stopped at about the same spot where the first settlers stopped, near the site of the old Log Tavern. / An inkling was had that it would come on Monday last, but our people supposing it would bring the noon passenger train, missed the sight, and consequently failed to give the stranger a public reception. / As it was however, a crowd of about a thousand, lined the track from the lookout to the depot, and made all ring again with their cheers. / It was an experimental trip and entirely successful under the careful management of Engineer Cool. We noticed C. P. Wurts, esq. the master machinist, and other employees on the Valley line, on the Engine, showing the travelling community thereby, that no passengers should be sent over the road, until it had been tested properly and they have a confidence in the strength of the various pieces for tessel [of trestle] work on the line."

A thousand people lined the track from the Lookout to the Gravity depot! What an amazing sight that must have been. What is the track that they lined? It was the final segment of Level 27 from Archbald to downtown Carbondale. The track descended the mountain from Archbald, passing through the Bushwick section of Carbondale Township to the Lookout. The track then crossed the Lackawanna River and swung North, to the west of the river, to downtown Carbondale.

Given below is a detail of the 1895 Gravity Railroad map volume that shows the Lookout Junction section as well as Level 27 as it crosses the Lackawanna River and enters downtown Carbondale.

This is one of the four Gravity bridges that were being showcased in the C. P. Wurts demonstration in 1861.



The trestle work on this bridge, as well as that on three other bridges on the Gravity line "down the valley" (the bridges on Planes 21 and 22, the bridge on the short track between the foot of Plane No. 23 and Valley Junction) is the trestle work that C. P. Wurts was interested in showcasing for the skeptical public.

What was the "iron horse" that pulled these cars into Carbondale? (Ironically, the cars did not need to be pulled into Carbondale as they would have coasted all the way down Level No. 27 to downtown Carbondale under the force of gravity.) We may never know which of the Gravity-gauge steam locomotives it was that day. It is, to be sure, less important to know which engine it was than to know that the work was successfully accomplished.

This steam locomotive that came into Carbondale might well have been one of the Gravity-gauge locomotives that proved to be not powerful enough for work at Plane 23, and was being sent to Honesdale for work at the canal basin. The *Honesdale*, for example, was built in 1861 and was found to be too small for work at Olyphant and was kept there only a short period of time, and then sent to Honesdale. The engine that came to Carbondale in December 1861 might well have been the *Honesdale* on its way to Honesdale.

Or the engine that came to Carbondale might well have been the *Major Sykes*, because the engineer at the controls when the first "iron horse" came to Carbondale in December 1861 was Engineer Cool, who had a direct connection with the Major Sykes, being the first engineer to run that engine.

Where did this engine come from? How did it get onto Level 27 for this experimental run in December 1861? It would be another ten years before the Valley Road between Scranton and Carbondale was opened, so the engine did not come "up the line" on the Valley Road. And it seems highly unlikely that the engine was sent north through the planes and levels from Olyphant to Level No. 27. What must have taken place is this: the engine must have been loaded onto a wagon and transported from the Providence/Valley Junction area to be the beginning of Level No. 27 above Archbald.

We do know that all of the engines built at the Dickson Works in Scranton were, before the opening in 1863 of the D&H line to Vine Street, transported from the Dickson works to Providence on heavy wagons, drawn by horses and mules. As such, it would not have been a significant problem to transport a Gravity-gauge engine from either the Dickson Works or from Providence to Carbondale (or near to Carbondale) for this promotional event.

C. P. Wurts was showing Carbondale the latest technology in rail travel—steam locomotives/iron horses. At the same time, he was promoting passenger traffic between Carbondale and Providence.

3. Providence to Green Ridge and Vine Street (passengers)—third rail installed in steam line

SOME DATES:

1859-up to 1863: Providence was the end of the D&H rail line. To get to Scranton, you took "the bus" (horse-cars/street railway) from Providence

1863: the D&H rail line was extended to Green Ridge and to Vine Street in downtown Scranton

January 1, 1864: Rollin Manville, who had been in the service of the company at Honesdale, as assistant superintendent, moved his headquarters to Carbondale on January 1st, 1864, and took sole charge of the operations of the company's railroad department in Pennsylvania, with the title of superintendent."

1866: The D&H Bridge Street station was built by the Union Railroad company of Wilkes-Barre, and the railroad from Green Ridge to Wilkes-Barre a distance of nineteen and one-half miles was also built and operated by the Union Railroad Company and latter company and afterward leased to the D. & H.

1867: The D&H built a 12-stall roundhouse and an iron turntable at Green Ridge:

"In 1867, a round-house of twelve stalls, together with an iron turntable, was built at Green Ridge. Two of these stalls were fitted up for a locomotive repair shop and the company's engines were repaired there until 1876, when the increasing number of locomotives made it imperative that a larger shop, with improved machinery, be erected, and a locomotive shop (which has since been considerably enlarged) was built near the Carbondale upper roundhouse in that year."Valley Road summary

1873: D&H Depot on Depot Street built

1874: D&H depot on Vine Street built

In 1866: the Union Railroad Company of Wilkes-Barre built the 19 ½ mile long line from Green Ridge to Wilkes-Barre.

Here is what Torrey has to say on the Valley Road, now five miles long, at this period:

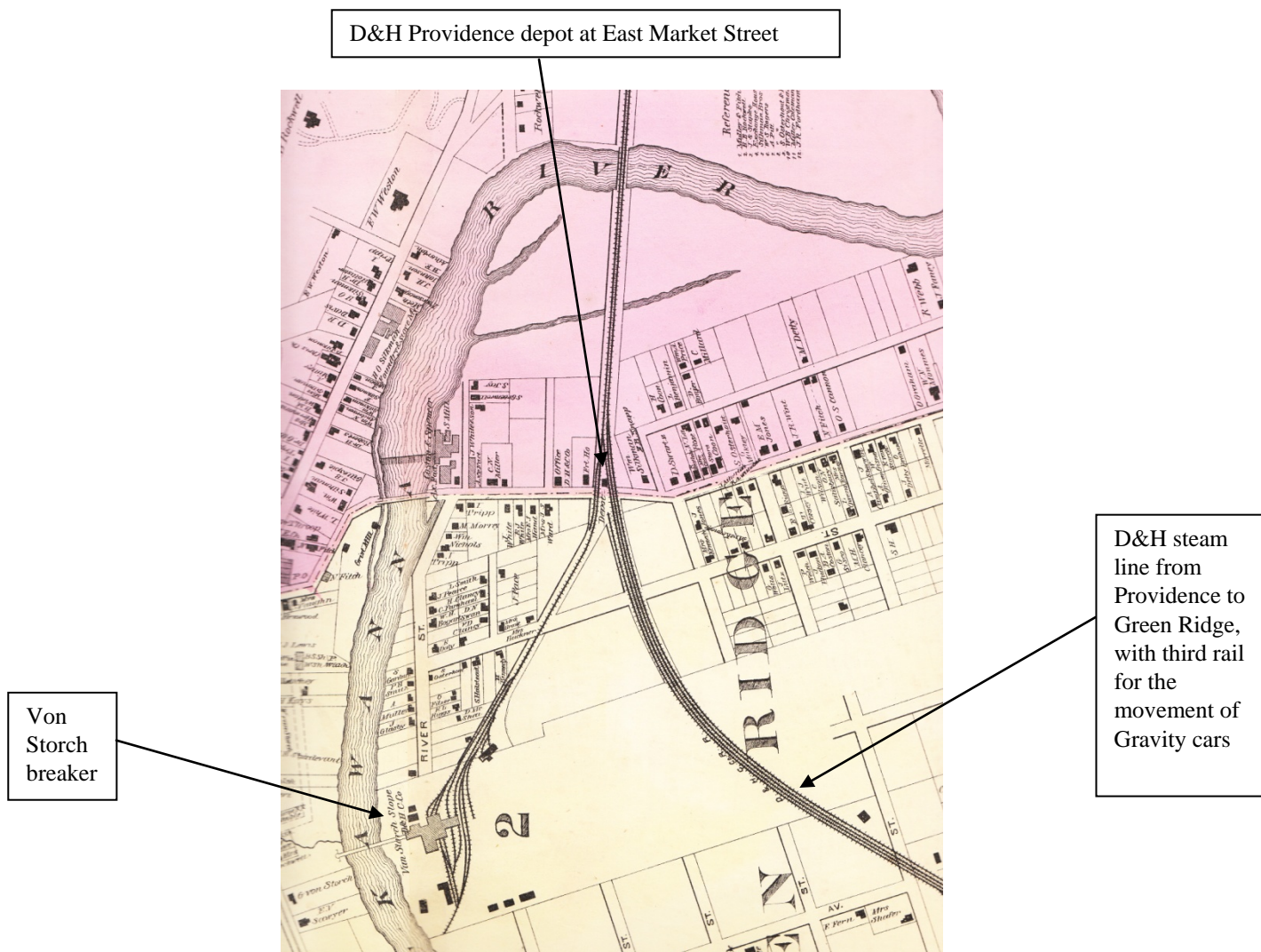
"Up to the year 1863, the mode of communication between the Providence end of the line and Scranton, was by bus. In that year, the line was built to Vine street, Scranton; and Carbondale and Scranton were then connected by railroad—cars running to the foot of 23 Olyphant, by Gravity, thence to Scranton by locomotive. [In 1863, "Scranton" on a D&H timetable meant "Vine Street"] This acquisition made the locomotive road nearly five miles long. Two passenger trains each way sufficed to accommodate the traveling public and one crew worked the trains. Isaac Decker was the first D&H passenger conductor. He was followed by J. B. Guyre and Alva Daley in succession. Mr. C. P. Wurts who had been the company's superintendent, now retired,

and Mr. R. Manville, who had been in the service of the company at Honesdale, as assistant superintendent, moved his headquarters to Carbondale on January 1st, 1864, and took sole charge of the operations of the company's railroad department in Pennsylvania, with the title of superintendent."

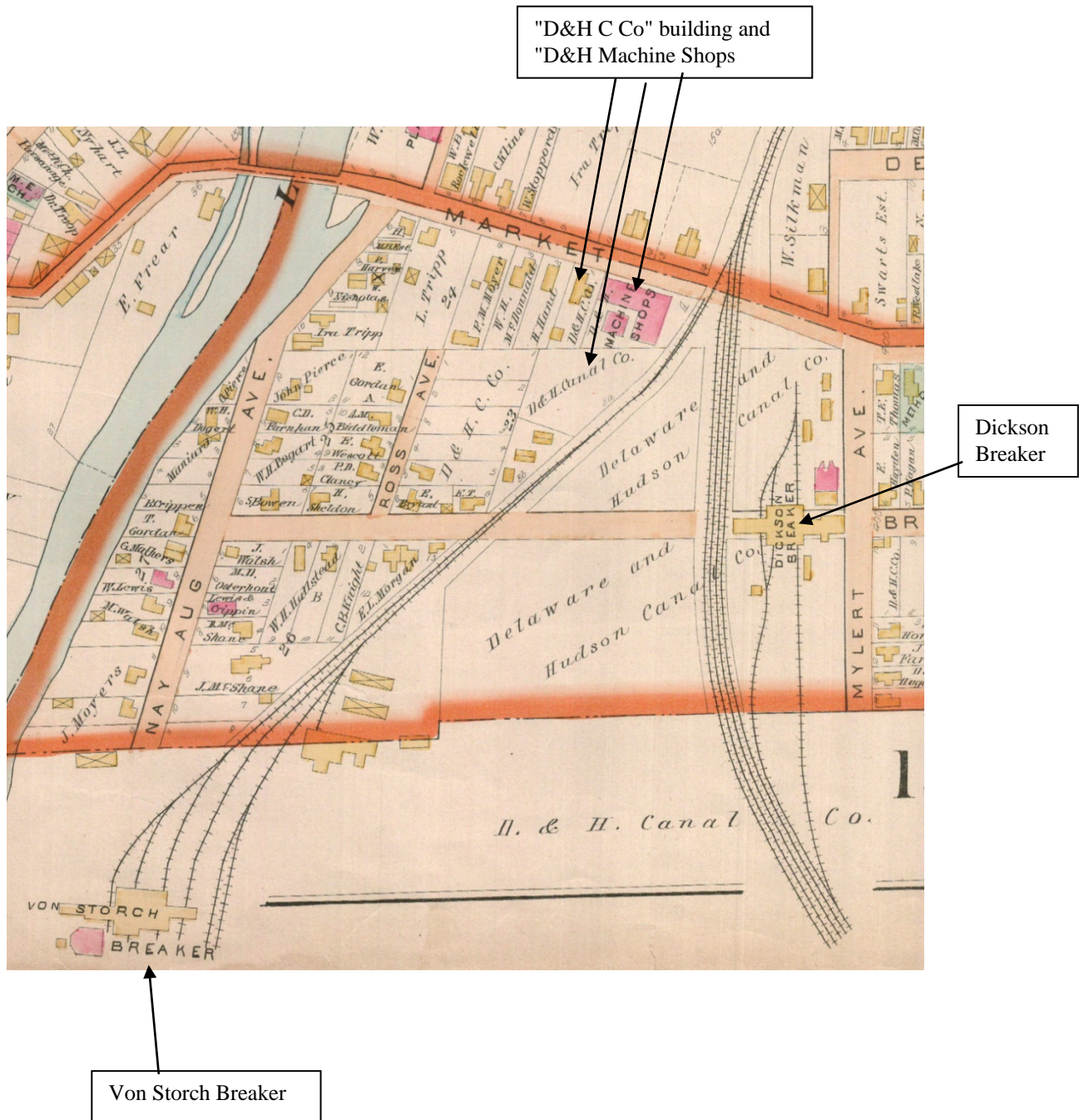
In 1867 the D&H built a 12-stall roundhouse and an iron turntable at Green Ridge:

"In 1867, a round-house of twelve stalls, together with an iron turntable, was built at Green Ridge. Two of these stalls were fitted up for a locomotive repair shop and the company's engines were repaired there until 1876, when the increasing number of locomotives made it imperative that a larger shop, with improved machinery, be erected, and a locomotive shop (which has since been considerably enlarged) was built near the Carbondale upper roundhouse in that year." Valley Road summary

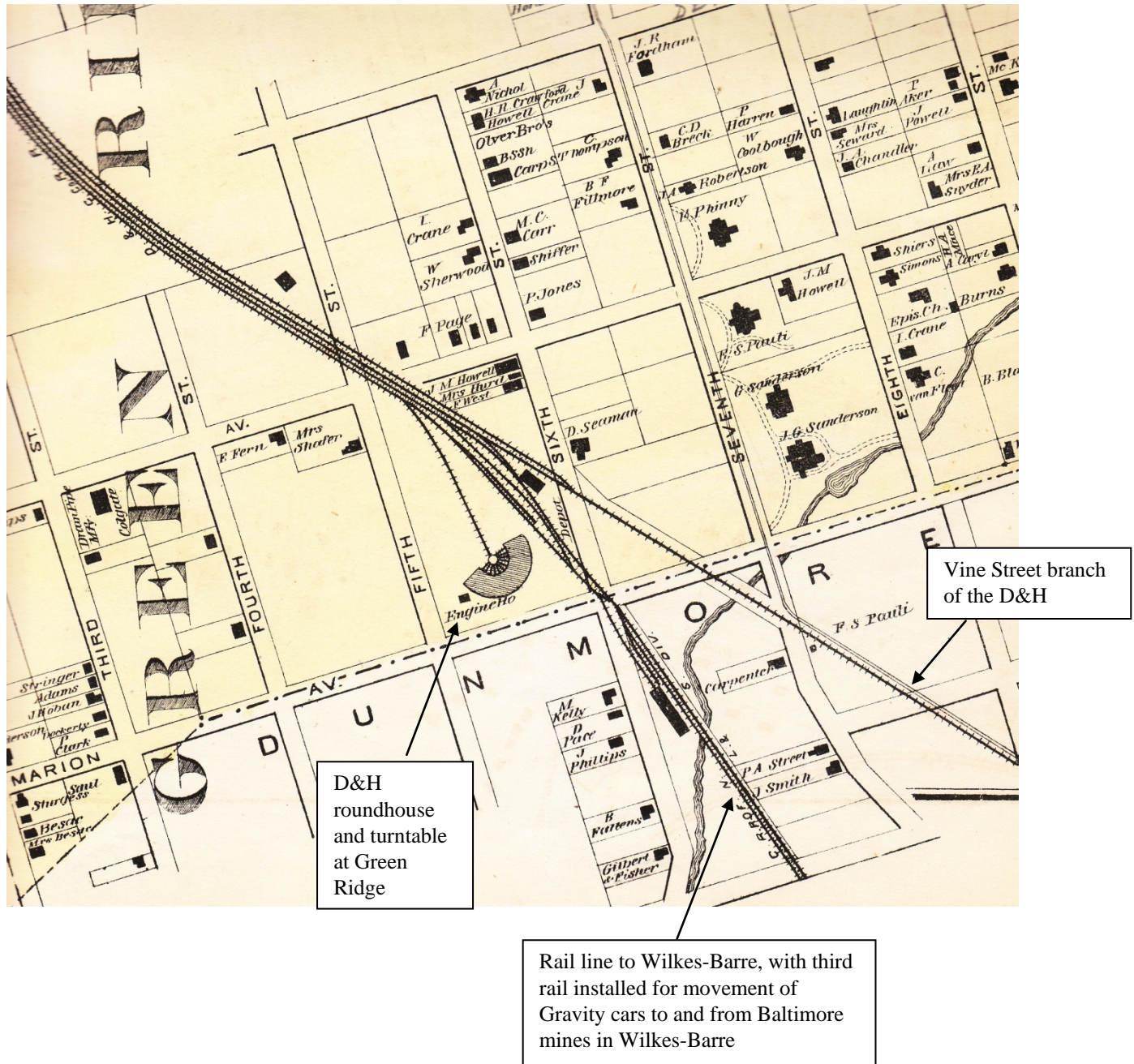
Given below is a view of the Providence and Green Ridge area from the 1873 D. G. Beers *Maps of Providence and the City of Scranton*:



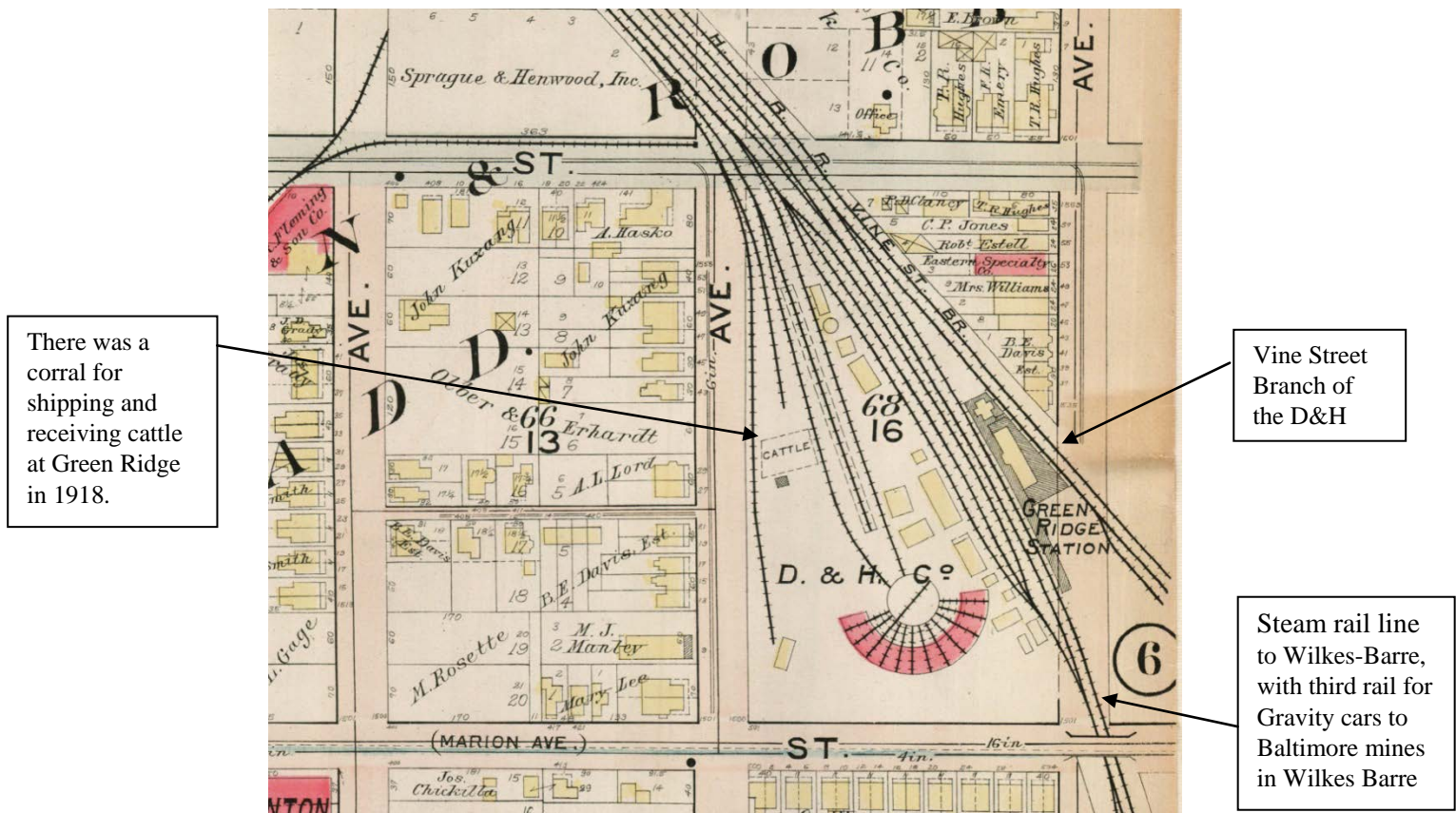
Here is how this same area appeared in 1899, as seen on the map of the *City of Scranton and Borough of Dunmore*. Note that the depot at Market Street is no longer there. Note also the D&H properties to the west of the tracks at Market Street.



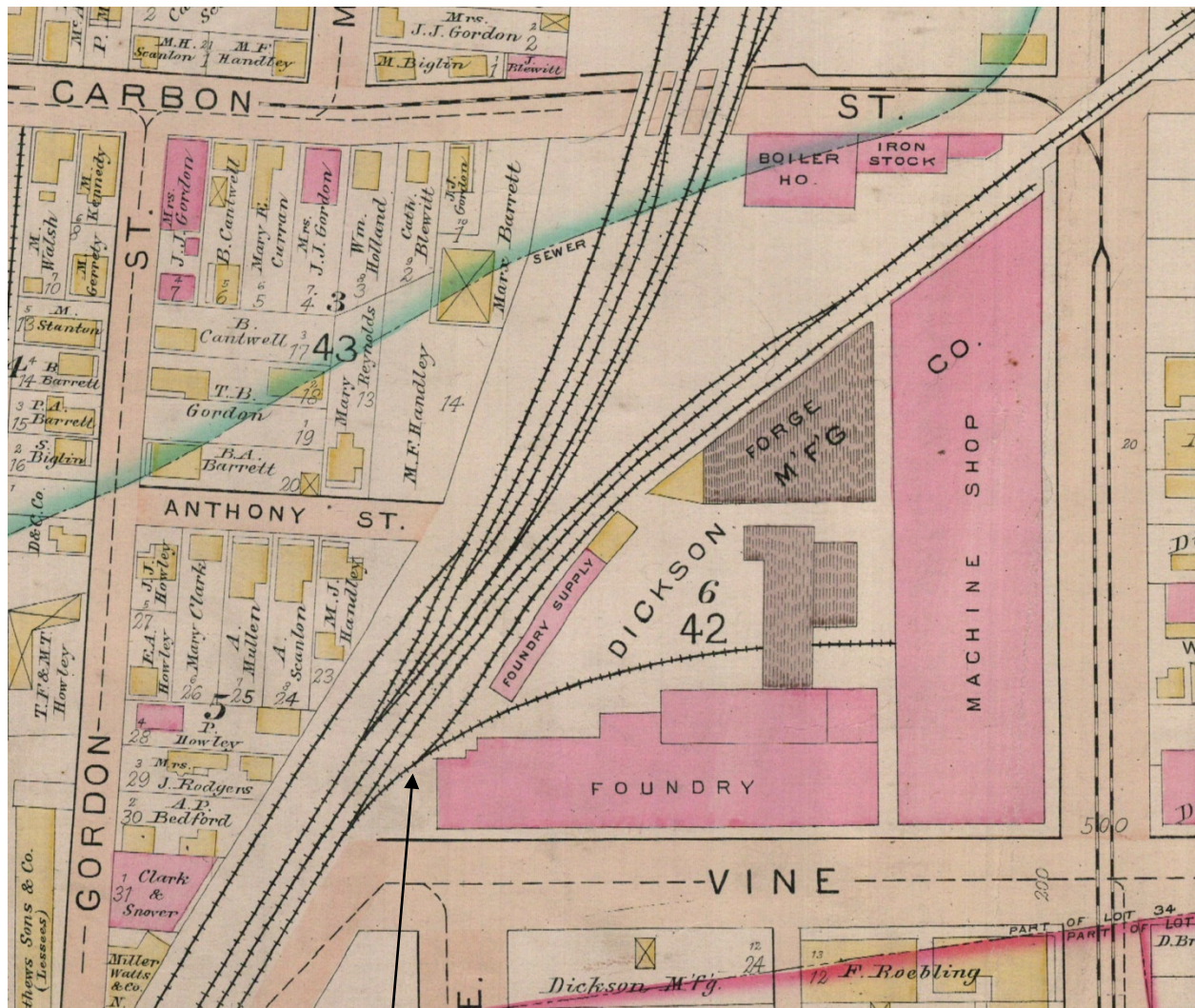
Given below is a view of the Green Ridge area from the 1873 D. G. Beers *Maps of Providence and the City of Scranton*:



Detail of the 1918 map of Scranton from "Atlas of the City of Scranton and Borough of Dunmore, Lackawanna County." Volk & Kuehls, Philadelphia, PA 1918, showing the Green Ridge station and roundhouse area and the beginning of the Vine Street branch of the D&H:



The D&H line was extended to Vine Street in 1863 but the Vine Street station was not built until 1874. With the extension of the D&H line to Vine Street, in 1863, the tracks of the D&H were then connected, on a trestle over the intersection of Olive Street and Penn Avenue, directly to the Dickson Manufacturing Company, which made it possible to drive new engines directly out of the Dickson works onto the D&H's Vine Street extension/branch.



Spur from Dickson Manufacturing Company to Vine Street branch of D&H

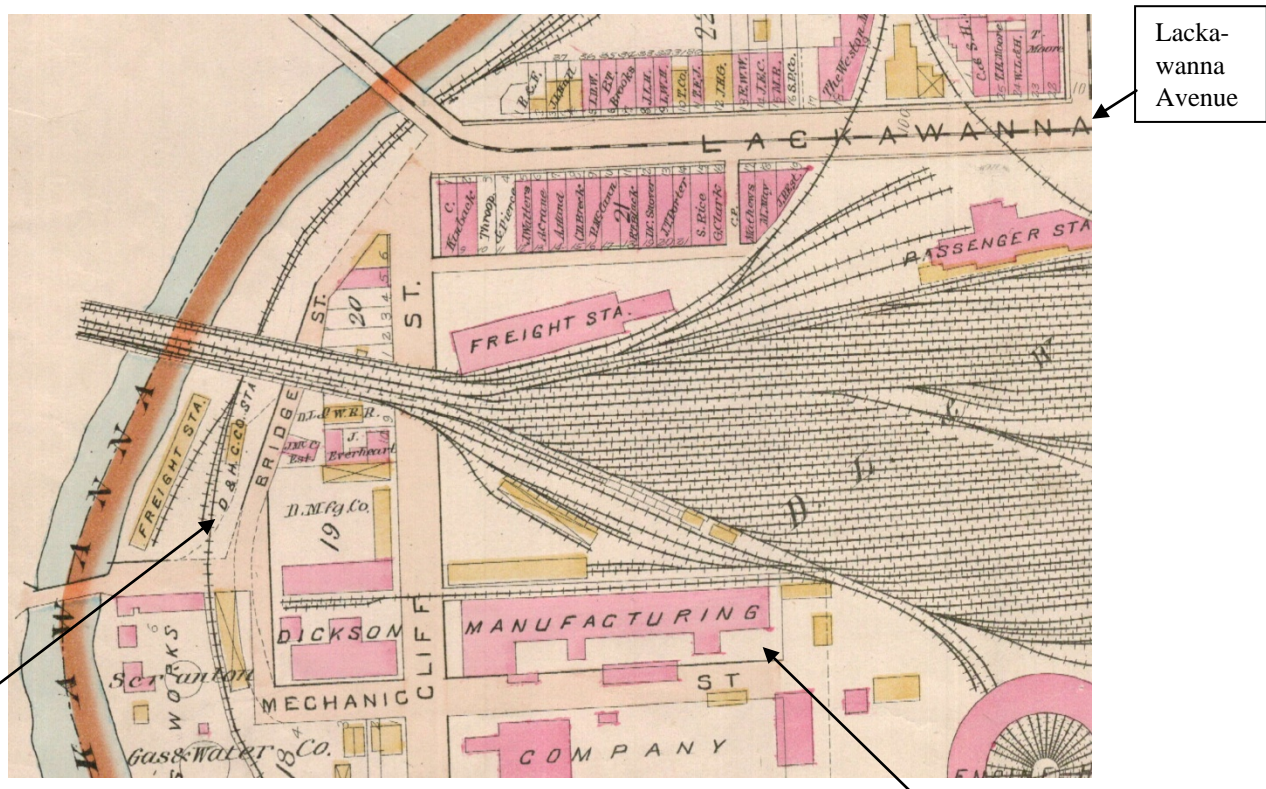
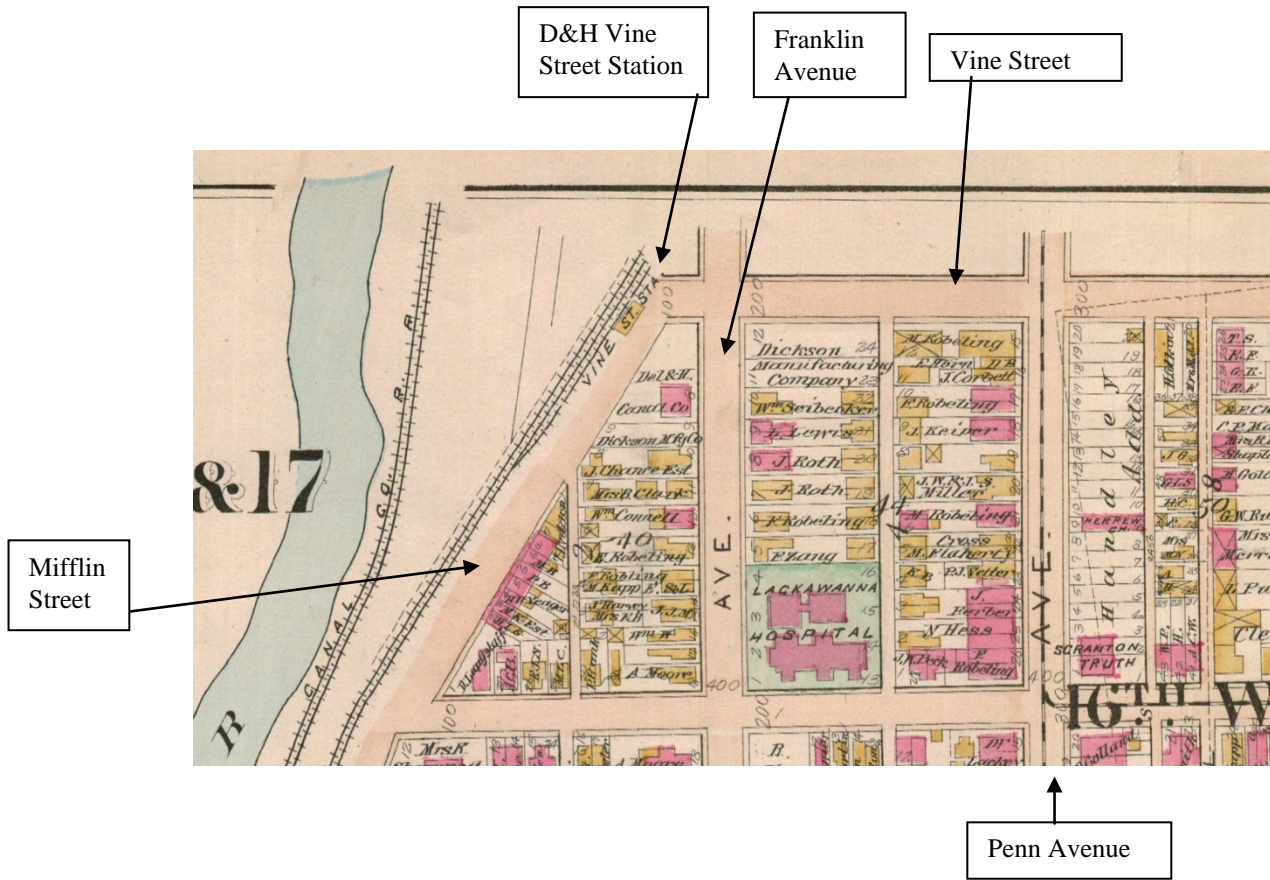
Penn Avenue

From the article titled “The New D. & H. Station” that was published in a Scranton paper in July (probably on the 28th or the 29th) 1894, we learn the following facts about the D&H Vine Street station and the D&H Bridge Street station, both of which were no longer used after 1894 when the D&H Lackawanna Avenue station opened:

“When placed in contrast with the present station of the company at Bridge street, the new building [on Lackawanna Avenue] is as a stately mansion compared with a rural habitation. The

service at the Bridge street and Vine street stations, will be concluded at 12 o'clock to-night, and the first train to leave the new station will be the Saratoga express, which departs at 5 o'clock Monday morning; and thereafter the passenger service of both stations will be conducted from the new station, and no more D. & H. passenger trains will run into the D. L. & W. depot. At the old station on Bridge street a freight service will be continued from the new freight houses erected on the east bank of the river, and the present Vine street station will be used as a store house for the keeping of books and other company documents held in this city. The service at the Vine street station has been small from a passenger or freight standpoint, but the building was used as the Scranton office of the company, and general freight agent of the western and southern divisions, Mr. Thomas F. Torrey of New York, was stationed there while in this city. It was only in extreme cases, such as excursions or events begetting heavy travel that the station did any considerable passenger business. / The Vine street station was built in 1874, when the contract was made with the D. L. & W. for the reception of D. & H. passengers and a memorable history of the company was deposited in the corner stone of the building April 30, of that year. / THE BRIDGE STREET STATION. / The present Bridge Street station was built by the Union Railroad company of Wilkes-Barre, in 1866, and the railroad from Green Ridge to Wilkes-Barre a distance of nineteen and one-half miles was also built and operated by the latter company and afterward leased to the D. & H. The transfer of the road has not been formally made but the stock of the Union Railroad company is now all absorbed by the D. & H. Co., which virtually makes that portion of the railroad D. & H. property. The road was run through this city [Scranton] about one year after the destruction of the D. L. & W. trestle by fire, and the subsequent building of the present stone bridge. / TROUBLE WITH THE CITY. / When the company decided to erect a new passenger station [the one that opened in July 1894] near the Lackawanna avenue bridge during the incumbency of Mayor [John H.] Fellows [1890-1893], considerable litigation resulted between the city and company because of the latter's alleged encroachment on a retaining wall built on city property. / The company was temporarily enjoined from erecting the building on the ground in dispute and subsequently the injunction was made permanent and the thirty inch space declared city property. / Apropos of this dispute and seemingly as a means of retaliation the company shortly afterward disputed the right of the Columbus Bridge company to place supports on its tracks while the eastern span of the Lackawanna avenue bridge was being constructed and one Sunday afternoon attempted to pull out the timbers placed on the track with an engine and car with connecting chain. This action resulted in the arrest of the engineer and some of the train hands, who were subsequently released on bail furnished by Mr. George L. Dickson, and the friction between the corporation and the city officials subsided after that incident. . .”

Given below are two details of the *Atlas of the City of Scranton and Borough of Dunmore*, published by L. J. Richards & Co., Philadelphia, PA, 1888, showing the D&H Vine Street station and the D&H Bridge Street station.



Part of the Dickson Manufacturing Company was located, here, south of Lackawanna Avenue in 1888.

In January 1864, a freight train was added to the daily trains between Carbondale and Scranton (and between Scranton and Carbondale), with the trains proceeding from Carbondale to Valley Junction (and from Valley Junction to Carbondale) by means of the Gravity system, and from Valley Junction to Scranton (and return) via the nascent D&H steam line. In 1864, Rollin Manville was the D&H superintendent.

Carbondale Advance, March 26, 1864, p. 1: two passenger and one freight train each way between Carbondale and Scranton (Scranton in this timetable means "Vine Street"):

DEL. & HUD. R. R. TIME TABLE.									
TAKES EFFECT JANUARY 11, 1864.									
TRAINS MOVING SOUTH.					TRAINS MOVING NORTH.				
A. M.	A. M.	P. M.			A. M.	P. M.	P. M.		
FRT.	PASS.	PASS.			PASS.	FRT.	PASS.		
7 30	8 25	2 20	CARBONDALE,		11 40	2 30	5 30		
7 55	8 35	2 40	Archbald,		11 10	2 00	5 00		
			Peckville,						
9 15	9 15	3 10	Olyphant,		10 46	1 35	3 36		
9 22	9 22	3 15	Dickson,		10 41	1 26	4 31		
9 30	9 30	3 21	Providence,		10 35	1 20	4 25		
9 36	9 36	3 26	SCRANTON,		10 30	1 00	4 20		
					R. MANVILLE, Supt.				
Carbondale, Jan. 11, 1864.									

In March 1865, still two passenger and one freight train each way between Carbondale and Scranton. The 7:30 A.M. freight train from Carbondale (in 1864) became an afternoon train (3 P.M.) in 1865. Passenger trains: times remained unchanged.

Carbondale Advance, March 11, 1865, p. 1

DEL. & HUD. R. R. TIME TABLE.									
TAKES EFFECT JANUARY 18, 1865.									
TRAINS MOVING SOUTH.					TRAINS MOVING NORTH.				
P. M.	A. M.	P. M.			A. M.	A. M.	P. M.		
FRT.	PASS.	PASS.			PASS.	FRT.	PASS.		
3 00	8 15	2 20	CARBONDALE,		11 40	9 45	5 30		
3 25	8 35	2 40	Archbald,		11 10	9 15	5 00		
			Peckville,						
4 55	9 05	3 10	Olyphant,		10 46	8 50	3 36		
5 02	9 12	3 15	Dickson,		10 41	8 26	4 31		
5 10	9 20	3 21	Providence,		10 35	8 20	4 25		
5 20	9 26	3 26	SCRANTON,		10 30	8 00	4 20		
					R. MANVILLE, Supt.				
Carbondale, Jan. 18, 1865.									

June 1865: two passenger and one freight train each way. The afternoon passenger train from Scranton now departed from Scranton at 4:40 P.M. (20 minutes later than in March 1865). Scranton here means Vine Street.

Carbondale Advance, June 3, 1865

DEL. & HUD. R. R. TIME TABLE.									
TAKES EFFECT MAY 29, 1865.									
TRAINS MOVING SOUTH.					TRAINS MOVING NORTH.				
P. M.	A. M.	P. M.			A. M.	A. M.	P. M.		
FRT.	PASS.	PASS.			PASS.	FRT.	PASS.		
8 00	8 15	2 30	CARBONDALE,		11 40	9 45	5 50		
8 25	8 35	2 50	Archbald,		11 16	9 18	5 25		
			Peckville,						
4 55	9 05	3 20	Olyphant,		10 46	8 50	5 01		
5 02	9 12	3 25	Dickson,		10 41	8 26	4 56		
5 10	9 20	3 31	Providence,		10 35	8 20	4 50		
5 20	9 26	3 36	SCRANTON,		10 30	8 00	4 40		
					R. MANVILLE, Supt.				
Carbondale, May 27, 1865.									

Scranton & Providence Passenger Railway

The Scranton & Providence Passenger Railway was a street car, also known as the "Sanderson Street Railway," which opened in 1867. It connected with the Delaware & Hudson Railroad at the 'Turn Tables' below Green Ridge, and took passengers direct to the Delaware, Lackawanna & Western Railroad depot from that point.

"Scranton & Providence Railway. / The Scranton & Providence Railway, familiarly known here as 'Sanderson Street Railway,' is now completed and formally opened to the public. / It connects with the Del. & Hud. R. R. at the 'Turn Tables' below Green Ridge, and takes Passengers direct to the Del., Lack. & W. R. R. Depot from that point. Connections with trains are thus pretty surely made that might otherwise be missed. A little experience will convince our neighbors that the 'Scranton Street Cars' are a very great convenience, and they will seldom omit transferring themselves to them at the 'Turn Tables.' " (*Carbondale Advance*, November 30, 1867, p. 3)

Two street car companies to merge to become Peoples Street Railway Company of Luzerne County:

"STREET RAILWAY CONSOLIDATION.—The Scranton & Providence Passenger R. R. Co. and the people's Street Railway Company have had arrangements with a view to consolidate the corporate rights, franchises, and property of each into one company, under the name of the 'People's Street Railway Company of Luzerne county.' The terms of the merger will be submitted to the stockholders of each company at once, and are such as will undoubtedly meet the approbation of both. . . " (*Carbondale Advance*, May 16, 1868, p. 3)

From November 11, 1867 on, one could travel easily from Carbondale to Scranton by means of (1) the D&H gravity and (2) the horse cars (street railway): D&H to the turn tables at Green Ridge, the horse cars from the turn tables at Green Ridge to the DL&W station in downtown Scranton.

Carbondale Advance, January 25, 1868, p. 1

"Junction" in the timetable given below surely must mean "Green Ridge; Scranton here means "Vine Street"

**DELAWARE AND HUDSON RAIL-
ROAD TIME TABLE.**—On and after Nov.
11th, 1867, trains will run as follows :

MOVING SOUTHWARD.

	Pass'r A. M.	Pass'r. P. M.	Accom'n. P. M.
Leave—Carbondale	8.00	2.20	3.00
Archbald	8.20	2.40	3.25
Peckville.....			
Olyphant....	8.45	3.05	3.50
Dickson.....	8.57	3.15	3.55
Providence.....	9.05	3.20	3.55
Junction.....	9.10	3.25	3.55
Arrive Scranton.....	9.15	3.30	3.55

MOVING NORTHWARD.

	Accom'n. A. M.	Pass'r. A. M.	Pass'r P. M.
Leave—Scranton.....	8.00	10.10	4.40
Junction.....	8.10	10.15	4.45
Providence.....	8.15	10.20	4.50
Dickson	8.25	10.25	4.55
Olyphant	8.40	10.30	5.05
Peckville ..			
Archbald.....	9.00	11.00	5.35
Arrive Carbondale	9.30	11.30	6.00

R. MANVILLE, Sup't.

**PASSENGERS ON THE DELAWARE
& HUDSON R. R.**

TO AND FROM SCRANTON OR PROVIDENCE.

**The Cars of the Scranton & Providence
Passenger Railway,**

will always be on hand to take passengers to and from the Del. Lack. & Western Depot, with their baggage, also to and from Providence on their arrival at Green Ridge Station. Fare, 10 cents. Baggage extra.
GEO. SANDERSON, President.

1868: two regular passenger train North and two South, daily, plus an accommodation train each way, daily.

Carbondale Advance, August 29, 1868, p. 4

DELAWARE AND HUDSON R. R. TIME TABLE.

Takes Effect May 11th, 1868.

TRAINS MOVING SOUTH.

		Pass'r. A. M.	Pass'r. P. M.	Accom'n. P. M.
Leave	Carbondale,	6.30	1.00	2.50
	Archbald,	6.35	1.25	3.30
	Peckville,	—	—	—
	Olyphant,	7.15	1.45	4.20
	Dickson,	7.27	1.55	4.30
	Providence,	7.35	2.00	4.50
	Junction,	7.40	2.05	5.00
Arrive	Scranton,	7.45	2.10	5.10

TRAINS MOVING NORTH.

		Accom'n. A. M.	Pass'r. A. M.	Pass'r. P. M.
Leave	Scranton,	7.10	9.00	4.00
	Junction,	7.20	9.05	4.05
	Providence,	7.30	9.10	4.10
	Dickson,	7.40	9.15	4.15
	Olyphant,	7.50	9.20	4.20
	Peckville,	—	—	—
	Archbald,	8.30	9.45	4.50
Arrive	Carbondale,	9.20	10.15	5.15

The 6.30 A. M. and 1.00 P. M. Trains connect with the Delaware, Lackawanna & Western R. R. for New York and the West, and Lehigh & Susquehanna R. R. at Green Ridge, and Lackawanna & Bloomsburg R. R. at Scranton, for Wilkes-Barre and points South.

Connecting Trains on Delaware, Lackawanna & Western R. R. wait 20 minutes, and the 4.00 P. M. Train waits for Delaware, Lackawanna & Western one hour, if the Trains on either Road are behind time

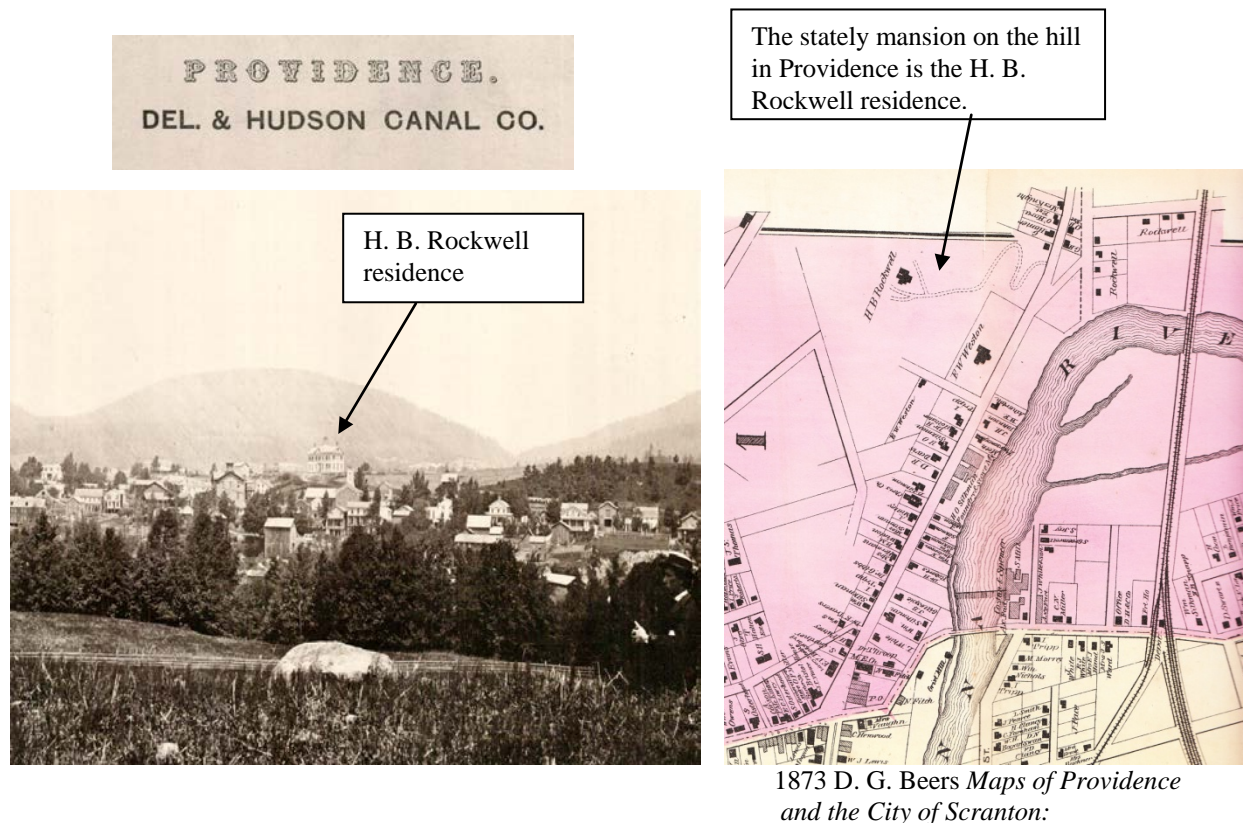
R. MANVILLE, Supt.

1868: Horse cars (street railway) ran over the D&H tracks at one point; later separate tracks for horse cars constructed:

"GREEN RIDGE.—Travel between town [Scranton] and Green Ridge has been suspended, as far as the street cars are concerned, the line having been withdrawn for the present. The contract allowing the People's line to run their cars over the Delaware & Hudson track expired, we think, on the 18th of last month, since which time they have been running on sufferance. The track has become impassible for horses, from the fact that the D. & H. is engaged in putting in new ties for the better accommodation of a third rail. [emphasis added] and they are doing it without filling in between the ties; hence the cars have been withdrawn. The embargo is not expected to continue more than two weeks as by that time the new line of the People's Company will be completed, when they will be independent of the D. & H. C. Co. It will be very inconvenient for the residents of that vicinity, but the interruption seems unavoidable and they must submit with the best grace they can.—*Scranton Republican.*" (*Carbondale Advance*, October 10, 1868, p. 3)

The Valley Road, the D&H steam line from Carbondale to Scranton, which will be the subject of Volume X in this series on the D&H, opened on July 4, 1871. With the opening of the Valley Road, passenger service up and down the Lackawanna Valley quickly switched from the Gravity Road to the Valley Road.

Providence in 1860: Photograph by Johnson (Scranton, PA) in the collection of the Wayne County Historical Society:



4. Providence to Green Ridge to Baltimore Mines in Wilkes-Barre (coal)—third rail installed in steam line

Another major extension of Gravity-gauge tracks south of the foot of Plane 23 was implemented in 1867 when Gravity tracks were extended from Green Ridge to the Baltimore mines in Wilkes-Barre. These Gravity tracks were not a separate rail entity unto themselves. Rather, a third rail was inserted in an existing rail line from Green Ridge to Union Junction (we will have a look in some detail at this rail line herebelow) which made it possible for Gravity cars to run from the foot of Plane No. 23 to the Baltimore mines in Wilkes-Barre. Here is the sequence of events that took place.

In 1863, the D&H Valley Road (the steam line) was extended south to Green Ridge

In 1866: the Union Railroad Company of Wilkes-Barre built the 19 ½ mile long line from Green Ridge to Wilkes-Barre.

In 1867 the Green Ridge roundhouse and turntable were installed:

"In 1867, a round-house of twelve stalls, together with an iron turntable, was built at Green Ridge. Two of these stalls were fitted up for a locomotive repair shop and the company's engines were repaired there until 1876, when the increasing number of locomotives made it imperative that a larger shop, with improved machinery, be erected, and a locomotive shop (which has since been considerably enlarged) was built near the Carbondale upper roundhouse in that year." Valley Road Summary

Gravity coal cars to Baltimore mines in Wilkes-Barre:

The extension of Gravity-gauge tracks from Providence to Green Ridge to the Baltimore mines in Wilkes-Barre was a part of a concerted program of expansion of D&H mining operations undertaken by President George Talbot Olyphant (elected president on March 15, 1858; took office on March 31, 1858) and Vice President Thomas Dickson. In order to buy the desired coal lands, the D&H had to get a supplement to its charter to allow it to hold an additional 3,000 acres of coal lands.

Here is that supplement to its charter:

LAWS OF 1859, No. 123.

A SUPPLEMENT TO AN ACT TO IMPROVE THE NAVIGATION OF THE RIVER LACKAWAXEN, passed the Thirteenth Day of March, One Thousand Eight Hundred and Twenty-three.

Authority to extend railroad beyond present terminus.

Authority to purchase and hold an additional quantity of land.

Additional power and authority to construct dams.

SEC. 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, in General Assembly met, and it is hereby enacted by the authority of the same, That the President, Managers and Company of the Delaware and Hudson Canal Company be, and they are hereby authorized to extend their railroads, with the necessary branches and fixtures, from the present terminus in the township of Blakely, Luzerne County, to any part of the adjoining township of Providence, in said County of Luzerne, and to any lands now owned or that may be hereafter purchased by them, under the provisions of this act, the damages for taking lands in the construction of said roads and branches to be assessed and secured in the manner pointed out in the provisions of an act passed the seventh day of April, one thousand eight hundred and fifty-eight, entitled "A supplement to an act to improve the navigation of the River Lackawaxen, passed the thirteenth day of March, one thousand eight hundred and twenty-three." And they are hereby authorized to purchase and hold an additional quantity of three thousand acres of land in the townships of Fell, Carbondale, Blakely and Providence, in the County of Luzerne, for the purpose of carrying on their operations.

SEC. 2. That in addition to the power now given to said company by the said act of March thirteenth, one thousand eight hundred and twenty-three, and its supplements, to erect dams on the Lackawaxen and its tributaries, for the purpose of the canal, the said company are hereby authorized to construct dams on the tributaries of the Lackawaxen and the Lackawanna and its tributaries, for the purpose of creating water power to propel the cars over and upon the railroads now constructed or hereafter to be constructed by them: *Provided*, That the navigation of said streams shall not be obstructed, and that the damages thereby occasioned, by taking and flowing land, shall be assessed, and secured in the manner pointed out in the said act of March thirteenth, one thousand eight hundred and twenty-three, and its several supplements.

W. C. A. LAWRENCE,
Speaker of the House of Representatives.

JNO. CRESSWELL, JR.,
Speaker of the Senate.

APPROVED—the twelfth day of March, A. D. one thousand eight hundred and fifty-nine.

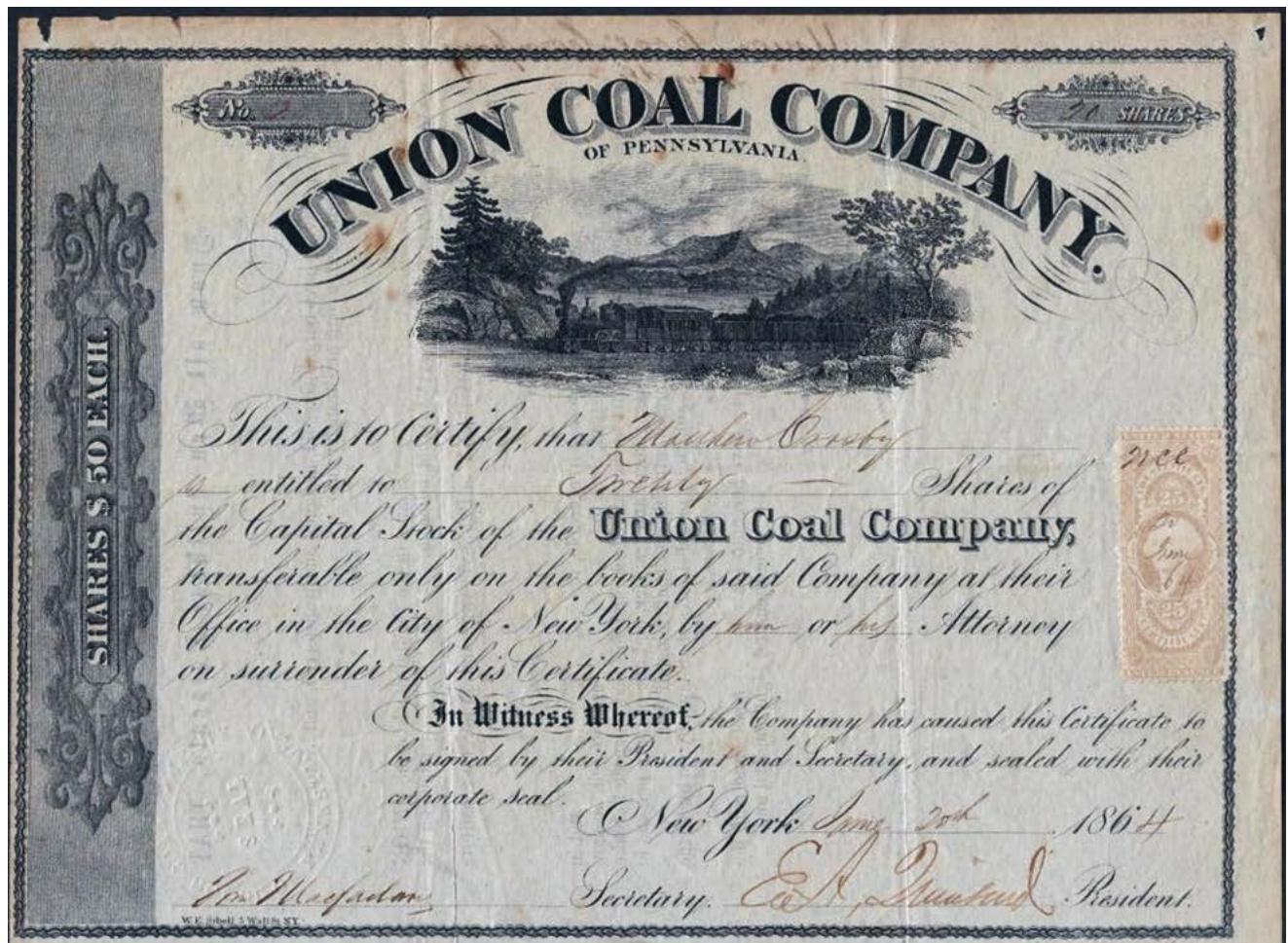
WM. F. PACKER.

The D&H then bought an additional 3,500 acres of land, 2,100 of which were owned individually by Olyphant, plus 1,400 in which he was a joint owner.

Acquiring new coal lands and transportation facilities:

Here is some background information. In 1866, the D&H opened business relations with the Union Coal Company to transport Union coal. The D&H then decided to help the Union Coal Company buy the property of the Baltimore Coal Company near Wilkes-Barre, and in 1867, lent the Union Coal Company \$1,300,000.

A Union Coal Company stock certificate signed by E. A. Quintard in 1864 is in the collection of John V. Buberniak.



In 1868, the Union Coal Company needed additional financial help, and the D&H set about acquiring both the Union and the Baltimore properties. The Union and Baltimore properties are described in *Century of Progress* as follows:

"...over three thousand acres of coal lands owned in fee, and eleven hundred acres held under favorable leases; four coal breakers with all appurtenances, capable of turning out more than two thousand tons of anthracite daily, and seventeen miles of railroad connecting with the [D&H] company's line in the Lackawanna valley near Scranton. The properties of the two companies (Union and Baltimore) also included four locomotives, five hundred and fifty coal cars and one hundred canal boats." (p. 197)

On February 20, 1868, all Union properties (coal lands and railroad) were sold under foreclosure and conveyed by deed, February 20, 1868, to Andrew T. McClintock and Thomas Dickson, in trust.

In *Century of Progress* (pp. 199-200), we read:

“By deed dated April 2 they [McClintock and Dickson] conveyed the property to the Baltimore Coal and Union Railroad Company, incorporated on April 8. Finally, by instrument dated December 1, 1868, the Baltimore Coal and Union Railroad Company leased its coal lands and railroad in the Lackawanna valley to the Delaware and Hudson Canal Company, conveying to the lessee the right to operate the railroad for the purpose of transporting coal, subject, however, to existing rights of the Lehigh Coal and Navigation Company to operate it for general purposes.”

***Hollister*, unpublished typescript, pp. 172-177: the movement of the D&H into the Wyoming Valley is described as follows:**

"The Managers Report submitted to the Stockholders for the year ending March 1st, 1868 gives the first glimpse of the movement of the Company into Wyoming Valley. / In the year 1866 a contract was made with the Union Coal Company, by which we agreed to transport for them a large quantity of coal, annually, on terms which were satisfactory to both parties. Subsequently it was deemed advisable to aid them in purchasing the valuable property of the Baltimore Coal Company, near Wilkes Barre, by a loan of \$1,300,000 and to obtain the necessary means for this object, an issue of ten year seven per cent Bonds, to the extent of \$1,500,000 was authorized. These Bonds were all promptly taken at par, chiefly by our stockholders to whom they were offered in proportion to the amount of stock held by them respectively. In January of the present year, the Union Coal Company became involved in financial difficulties, which will probably result in the absorption of their entire property by this Company, at a total cost to us, including the \$1,300,000 loaned them as already mentioned of \$2,650,000. / The united properties of the Union and Baltimore Company embrace over 3,000 acres of Coal lands in fee, and 1,100 acres under lease of favorable terms; four breakers with all necessary appurtenances, capable of turning out over 2,000 tons per day, 17 miles of Railroad, connecting with our line near Scranton, and equipped with four locomotives and 550 coal cars, and about 100 Canal boats. / About the close of 1867, an opportunity offered for the purchase of another important Coal Estate, at Plymouth, opposite Wilkes Barre. / A Committee of Managers, with the President, visited this property, and on their unanimous recommendation, it was purchased for the sum of \$1,575,000. It embraces the following lands and improvements: 803 acres of Coal Lands in fee, / 235 acres of Coal Lands on favorable lease, / 3 Mine Openings, / 1 Breaker, complete, and 1 in course of construction, / Store and Houses, Grist Mill, etc., / Mine Houses. / A first-class railroad bridge over the Susquehanna, and two miles of Railroad connecting the property with the main

line of traffic on the east side of the river. / By the acquisition of these two estates, our Company will increase its supply of Coal in the land to the extent of 100,000,000 tons. / In making these additions to our Real Estate, the Board have aimed to lay a broad and solid foundation for a steady and important increase in our future production of coal, and a great enlargement of our field of operations. / Experience has demonstrated, that economy in the cost of production, keeps pace with the increase of the quantity produced, and if we are hereafter to hold our place with our great competitors in the Coal trade, we must continue to furnish the same relative proportion of the general supply which we have hitherto done, until the aggregate production of Anthracite Coal has reached its highest point. / This vast acquisition of coal property was expected by the Board of Managers to over-tax the transporting capacity of the gravity railroad between Providence and Carbondale. In 1868 they agitated the plan of substituting a locomotive road along the valley in its place to connect with the Union Railway a mile below Providence in a meadow called Providence Station then, and Green Ridge afterwards. Green Ridge in 1868 had no name or being. Upon the ancient lands of John Dings, Joshua Griffin and Michael Lutz embracing a green slope on the east side of the Lackawanna opposite the Indian meadow of Capoose a mile from Scranton, this village or appendage of Scranton has emerged within the last decade. Hon. George Sanderson, the founder of it, a man of strong good sense, and great public spirit, enriched himself by purchasing a portion of these acres several years ago, and encouraging a village, which, although tidy and hospitable as the home of a wealthy class depends upon Scranton proper for its sustenance, trade and mail. It is now the Northern terminus of the Lehigh & Susquehanna Division of the Central Railway of New Jersey. In March 1869 the following were elected: / **MANAGERS AND OFFICERS of the DELAWARE & HUDSON CANAL COMPANY / BOARD OF MANAGERS:** Charles N. Talbot, Edward J. Woolsey, G. Talbot Olyphant, Abiel A. Low, Robert Lenox Kennedy, James M. Halsted, LeGrand B. Cannon, James R. Taylor, Thomas Dickson, John Jacob Astor, Thomas Cornell, W. J. Hoppan, Isaac N. Seymour. . **PRESIDENT** Thomas Dickson, Scranton, Pa. / **TREASURER** Charles B. Hartt, New York City / **SECRETARY** Richard H. Nodyne, New York City / **SALES AGENT** James C. Hartt, New York City / **GENERAL SUPERINTENDENT** Coe F. Young, Honesdale / **SUPERINTENDENT of COAL DEPT.** E. W. Weston, Providence, PA. / **SUPERINTENDENT OF RAILROAD DEPARTMENT** R. Manville, Carbondale, Pa, / **SUPERINTENDENT OF CANAL DEPARTMENT** Asher M. Atkinson, Honesdale, Pa. / **SALES AGENT SOUTHERN AND WESTERN DEPARTMENT** Joseph J. Albright Scranton, Pa. / In September 1868 a contract was made with the Erie Railway Company by which they engaged to construct a railroad—the Jefferson Branch—from Carbondale to the main line of Susquehanna to be completed June 1, 1870 and thereafter transport coal for the Delaware and Hudson Canal Company to Rochester and Buffalo and from Honesdale to Weehawken Dock during the Winter months. [emphasis added] / The incipient weaving of that web of union between the Dominion of Canada and the Coal Field of Pennsylvania, is revealed in these confident measures of the President towards its completion. The Board of Managers, through President Dickson, in their Annual Report for the year ending March 1869, thus alludes to the requirement and the contemplated expansion of the company's Railroad. / The construction of an easy line from Susquehanna to Nineveh on the Albany and Susquehanna Railroad,

a distance of 20 miles, will give us the control of the shortest and in every respect the best connection between the anthracite coal fields and the numerous and growing towns on that important road. A satisfactory arrangement for the transportation of our coal was made some years ago with the Albany and Susquehanna Company, and the Board are of the opinion that steps should be taken at an early day to secure the valuable market thus brought within our reach. The cost of the road which it will be necessary to build for this purpose is estimated at \$650,000. /Very considerable and costly changes will need to be made in our road between Carbondale and Scranton, to provide for the increase tonnage to be passed over it, when the western and northern connections already mentioned shall have been completed. / It will probably be found that the most effectual and in the end the most economical mode of accomplishing this object will be to do away with our present gravity system between Carbondale and Olyphant, and to build in place of it a double track locomotive road, adding a second track to the road already constructed from Olyphant to Scranton."

Baltimore Coal and Union Rail Road Company

The first president of the Baltimore Coal and Union Rail Road Company was Edward A. Quintard, after whom the standard-gauge D&H locomotive No. 7 (purchased May 1, 1867) was named. Here is the engraving of the likeness of Quintard that is given on page 199 of *A Century of Progress*:



Here is some additional information on Engine No. 7, E. A. Quintard, which headed the Saratoga Express:

“Engine No. 7, ‘E. A. Quintard,’ which was nearly smashed up a few months ago is again on the track after being thoroughly repaired. She has spent four months in the Dickson Works, and last Saturday was brought to Carbondale and placed in the round house, where under the skillful supervision of Mr. Eitel, the engine dispatcher, the necessary fixtures were added to her and on Thursday of this week, she took her old place on train 1 and 2 (Saratoga), with an entirely new steel boiler, cab. &c. Engine 7 now looks like a new engine and her appearance and general make-up are calculated to make glad the heart of her trusty engineer, Miles Biesecker.” (*Carbondale Leader*, February 9, 1883, p. 2)

More on Jacob Eitel, who was the engine dispatcher at the Carbondale Roundhouse at the time:

"JACOB EITEL was born in 1831, in Germany, where he married Eouisa Romelmeyer; came to Carbondale in 1871; engaged in the employ of the Delaware & Hudson Canal company, and in 1874, he was appointed foreman of the round-house. He served in the late war, in the 2nd New Jersey infantry, from 1861 to July, 1864." (1880, p. 452B)

Through this purchase of the Union Rail Road Company and the Baltimore Coal Company, the D&H gained not only enormous coal resources, but also significant railroad opportunities. In *Century of Progress* (p. 198) we read:

" . . . the railroad advantages that offered were considerable. The Union Coal Company, after it had merged with the Howard company in February, 1867, completed railroad construction northward from Union Junction, in the Lackawanna Valley, to Green Ridge. The location of Union Junction may be stated as approximately one and one-half miles north of the present station at Hudson on the Pennsylvania division of the company's railroad, so that the railroad from Union Junction to Green Ridge covered a distance of nearly fifteen miles. As Hudson is only three and one-half miles north of Wilkes-Barre, it is apparent that a long step toward the latter had been taken."

In addition, in 1867-68, the D&H purchased an important "Coal Estate" at Plymouth, opposite Wilkes-Barre for \$1,575,000, the title taken in the name of the Northern Coal and Iron Company. This "Coal Estate" consisted of 803 acres of coal lands owned in fee, 225 acres held on favorable leases, 3 mine openings, one operating breaker, one breaker under construction, store properties, houses, a grist mill, and mine houses, also a first-class railroad bridge across the Susquehanna River, with two miles of railroad connecting the property with the main line of traffic on the east side of the river.

New configuration of Gravity Railroad now necessary:

With the acquisition of these huge new coal lands and rail facilities, the possibility of sending to market a greatly increased quantity of coal made it imperative that the shipping capacity of the

D&H's Gravity Railroad be increased. And so in 1866 important new revisions of the roadbed were initiated.

Integrating these new coal lands and transportation facilities into the existing D&H system:

What was the nature of this rail line, the Union Railroad (connecting the Lehigh and Susquehanna Railroad at Wilkes Barre with the Delaware & Hudson Railroad near Providence), built by the Union Coal Company, between Green Ridge and Union Junction?

When did it open?

The D&H say that it was opened in 1866—which is incorrect:

The line between Green Ridge and Union Junction was opened, says the D&H in 1866. In *Passenger, Freight and Work Equipment on the Delaware and Hudson*, The Delaware and Hudson Company BOARD OF MANAGERS INSPECTION OF LINES, June 2, June 5, 1927, p. 21, we read: "The Union Coal Company opened, in 1866, the line between Green Ridge and Union Junction. (15 miles)."

The Valley Road Summary says that it was opened in 1867—which is correct:

"In 1867, the Union Railroad, between Green Ridge and Union junction, near Mill Creek, was completed."

As it turns out, it appears that both are correct. The lease was dated November, 1866; the line was completed and opened in 1867.

What was the nature of the tracks?

"Up to this time, the gauge of track was 4 ft. 3 inches, but in constructing the line to Union Junction, a third rail was laid, making two gauges, the one 4 ft. 3 inches, the other 4 ft. 8 ½ inches." *Valley Road Summary*

From Olyphant to Green Ridge, the D&H tracks were also dual gauge: Gravity and standard. With the opening of the Union Railroad in 1867, then, there were Gravity-gauge and standard gauge tracks from Olyphant to Union Junction.

Getting to the Baltimore mines from Union Junction:

"The Gravity, or 4 ft. 3 in. gauge, was extended to the Baltimore mines, near Wilkes-Barre, over the tracks of the Lehigh Coal & Navigation company, and Gravity cars now ran between Honesdale and the Baltimore mines. The first standard gauge engine for the Union Railroad was named 'Mill Creek.' She was built at the Grant Locomotive Works, and was brought to the National Crossing, near the Minooka station, over the tracks of the Delaware, Lackawanna & Western company, on April 2d, 1867. She was pushed down the line a short distance, and her boilers filled with water carried from the river in pails. The fire was started by D. C. Benscoter, who acted as fireman; the engineer's name was John Bloom. When the 'E. A. Quintard', now

No. 7, was purchased, May 1st, 1867, engineer Bloom and fireman Benscoter were transferred to her, and the Mill Creek was sent to Mill Creek to do switching and mine work." *Valley Road Summary*

Union Coal Company leased, for twenty years, the rights to run passenger and merchandise traffic over this line between Union Junction and Green Ridge to the Lehigh Coal & Navigation Company:

"The Union Coal company, as soon as the railroad to Union Junction was completed, leased the exclusive right to run passenger and merchandise traffic between Union Junction and Green Ridge, for a period of twenty years, to the Lehigh Coal & Navigation company; the latter company afterward transferred this lease to the C. R. R. of N. J." *Valley Road Summary*

"In November, 1886, the twenty-year lease for the right to run passenger and merchandise traffic over the Union railroad, by the C. R. R. of N. J., expired, and the Delaware & Hudson assumed entire control of the line through to Wilkes-Barre, the extension from Mill Creek to Wilkes-Barre having been built in this year in anticipation of the expiration of the aforesaid agreement. More passenger trains were called into service, and promotions for the trainmen were a natural sequence." *Valley Road Summary*

The D&H, however, could and did ship coal over this line (from Union Junction to Green Ridge) and did so, beginning on June 18, 1867. From the Baltimore mines to Union Junction, a third rail was inserted by the D&H in the tracks of the Lehigh Coal & Navigation Company. From Green Ridge to Olyphant were the D&H's own Gravity-gauge and standard-gauge tracks. And so, from June 18, 1867 on, Gravity cars could travel from the Baltimore mines to the foot of Plane 23 in Olyphant. This made it possible for the D&H to increase significantly the amount of coal that it was able to ship to Honesdale and to market.

A month before the official opening of this trackage to the D&H, the D&H ran an excursion train of ten coaches over the line from Wilkes-Barre to Green Ridge:

On May 18th, 1867, an excursion train of ten coaches was run over this line between Wilkes-Barre and Green Ridge, and as the Green-Ridge turntable had not then been completed, the 'E. A. Quintard' was sent to Green Ridge, headed south, to haul the train on the trip back to Wilkes-Barre. . : *Valley Road Summary*

And during the first week of June, 1867, during the annual inspection excursion trip of the directors and officers of the D&H, the group took the Lackawanna & Bloomsburg Railroad from Scranton to Wilkes-Barre and returned to Scranton upon the Union Railroad:

"Del. & Hud. Canal Excursion. / The annual excursion trip of the directors and officers of the Del. & Hud. Canal Co. came off on the first week in June. This party this year consisted of Thos. Dickson, Acting Pres., wife and daughter, Scranton; E. W. Weston, Supt. Coal Dept., and wife, Scranton; R. Manville, Supt. R. R. Dept., and wife, Carbondale; C. F. Young, Supt. Canal Dept., and wife, Honesdale; Hon. T. P. Howell, wife and daughter, New York; P. H. Balentine, wife

and daughter, New York; C. A. Sprague, wife and sister, New York; W. J. Schenck and wife of the Merchant's Hotel New York; P. J. Dubois, wife and daughter, Kingston; L. C. Fuller, Scranton; Rev. Dr. Terhune, R. D. Church, Newark; W. C. Rose, Div. Supt. and daughters, Port Jervis. / They left Rondout in the Packet *Dyberry*, on the Fourth of June, and arrived in Honesdale on the Seventh--making the trip over the canal in three days. The party reached here [Carbondale] on Sunday en route to Scranton. / At Scranton the party took the Lackawanna & Bloomsburg Railroad to Wilkes Barre, and returned to Scranton upon the *Union Railroad*. That Railroad connecting the Lehigh and Susquehanna Railroad at Wilkes Barre with the Del. & Hud. Railroad near Providence is expected to be formally opened on Tuesday next, 18th inst." (*Carbondale Advance*, Saturday, June 15, 1867, p. 3)

William C. Rose, who was among that annual inspection excursion party, was the superintendent of the D&H Canal. From the portrait of his son, Charles C. Rose, that is given in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 827-828, we learn that W. C. Rose was reared in Sherburne, NY, and as a young man was employed on the Erie Canal. He was later named superintendent on the Delaware & Hudson Canal, and served the D&H in that capacity for forty years. The village of Rose Point was named in his honor. He married Lovina Shimer, who was born in Montague, NJ. One of their three sons, Lyman O. Rose, was, in 1897, the superintendent of the D. & H. Canal. Another of their sons, Charles C. Rose, was, in 1897, the general superintendent of the coal department of the D&H Canal Company.

In the biographical portrait of Charles C. Rose mentioned above, we read, pp. 827-828, the following about his work career:

"For one year Mr. Rose was with the Delaware & Hudson Canal Company, after which he was employed in the office of the superintendent of the Erie Railroad in Port Jervis, and then was engaged as civil engineer in an engineering corps near Monticello. Afterward he was with the New Jersey Midland, and then for five years was employed in work for the Delaware & Hudson along Lake Champlain on their railroad. For two years he was a civil engineer and surveyor on Staten Island for the water company, and also held the position of assistant city engineer. For one year he was with the Erie as a civil engineer, and later built the reservoir for the Port Jervis Water Company. His next position was with the Delaware, Lackawanna & Western in the construction of a new road between Binghamton and Buffalo. On the completion of the contract, in 1882, he came to Scranton and was made assistant chief engineer by the same company, being selected from a corps of thirty. / In January, 1896, he resigned and took a position with the Delaware & Hudson as assistant superintendent of the coal department. January 1, 1897, he was made superintendent. / In 1897 Mr. Rose married Emma K. Watson of Port Kent, N. Y. . . By that union one son was born. . . The wife died a few days after the birth of her son. In Scranton Mr. Rose married Miss Emma Vandling, who was born in Kingston, N. Y. a daughter of A. H. Vandling, former superintendent of the coal department of the Delaware & Hudson Canal Company."

The formal opening of the Union Railroad, on June 18, 1867, was a highly significant event in the history of the D&H. For that event, the officers and officers of the D&H came to town:

"IMPORTANT RAILROAD OPENING. Our town [Carbondale] was visited on Wednesday by the Officers of the Lehigh and Susquehanna Railroad Co., the Union Railroad Co., the Del. & Hud. Canal Co., and other excursionists, making a formal opening of the Union Railroad Co., which forms the connecting link between the Lehigh and Susquehanna at Wilkes Barre and the Del. & Hud. at Providence. / This opening is an important one to our valley in general, facilitating communication and transportation, and will be very beneficially felt in many localities. It gives Wilkes Barre direct communication out, both ways, on its own side of the river, with choice of routes to New York and Philadelphia. It also gives us in addition to what we had before another direct line of communication with the seaboard cities. Scranton now has the advantage of Wilkes Barre, only in a direct line North." (*Carbondale Advance*, Saturday, June 22, 1867, p. 3)

Interesting side note:

In 1871, the D&H built its own line from Union Junction to Mill Creek. In that same year, the steam line between Carbondale and Valley Junction (12.26 miles) was built and connected with the road from Valley Junction to Scranton. In the Valley Road Summary, we read the following about this important linkage in 1871:

"This marks an epoch in the history of the Lackawanna valley, and the names of the men to whose foresight and energy these results were due should be kept green, and they deserve to live in the memories of future generations as the great benefactors of the Anthracite City."

The immensely important consequence of these extensions was this: empty Gravity coal cars could now run Honesdale to the Baltimore mines, and loaded Gravity coal cars could now run from the Baltimore mines near Wilkes-Barre to the D&H Canal at Honesdale!

On the question of these extensions and track modifications, we read the following in "Our Own 'Gravity Road', p. 9 of *The Delaware and Hudson Canal Company Bulletin*, July 15, 1925:

"The road was extended from Archbald to its end at the 'Foot of G,' south of Olyphant, in 1859. A single track was built from Olyphant to Providence and later to Green Ridge, this portion of the road being operated by locomotive, and a third rail was laid to a standard gauge when the 'Valley' line was built from Carbondale to Olyphant in 1871.[Not so. A third rail was installed from Valley Junction to Providence in 1860. Also a third rail was installed when the line was extended from Providence to Green Ridge in 1863.] A third rail was subsequently laid [Not so. A third rail was installed in the line from Green Ridge to Union Junction in 1867.] within the standard gauge from Green Ridge to Hudson so that coal could be shipped in the gravity cars direct from the breakers to the canal." (Our Own 'Gravity Road', p. 9 of *The Delaware and Hudson Canal Company Bulletin*, July 15, 1925)

Jim Shaughnessy in *Delaware & Hudson* says (pp. 68-69):

“In the meantime in 1870, a locomotive-operated road was built between Carbondale and Olyphant, near Scranton, and a second track was added to the original flat stretch from Valley Junction near Olyphant to Green Ridge, adjoining Scranton. Strangely enough, a third rail was laid on this line too, only this one was at a 4’-3” gauge to accommodate gravity equipment. On many stretches of the lines below Carbondale four rails were used: one common running rail, a 4’-3” gravity rail, a standard gauge rail and six-foot rail for Erie equipment.”

Shaughnessy’s use of “strangely enough” suggests, perhaps, that he was not aware that the Gravity gauge was installed to the Baltimore mines, near Wilkes-Barre over the tracks of the Lehigh Coal & Navigation company.

The movement of Gravity cars on the line from the foot of Plane 23 to the Baltimore mines and return, as to the Von Storch and Richmond breakers and return, was by Gravity-gauge steam locomotives. In the "1890s Summary" we read the following on some of these Gravity-gauge steam locomotives:

"This engine [Major Sykes] was built at the Dickson Manufacturing company’s works, Scranton, Pa., in 1860 [No, it was built by W. Cook & Co., Scranton, 1860], to haul coal from Van Storch and Richmond breakers—the only ones then in operation—to the foot of plane 23 Olyphant; Henry Cool, who now runs a locomotive on the New York Central, was the first engineer to work her. [In the biographical portrait of Robert D. Copeland in the January 1, 1933 issue of *The Delaware and Hudson Railroad Bulletin* (pp. 3, 11) we read the following: “From the time, July 17, 1873, when he started carrying water for his father, then foreman of the Gravity road, until his retirement on February 1, 1932, MR. COPELAND’S life has been replete with thrills similar to the incident described above [collision between Olyphant and Providence] but he has come through it all without a mark on either himself or his record. / After carrying water to sectionmen, young ROBERT became a sort of handyman on the Gravity, acting as headman, footman, brakeman, and even as rodman for Sheldon Norton, the chief surveyor. / In 1878 MR. COPELAND left the Gravity for the ‘Steam Road,’ his first assignment being as brakeman on *Major Sykes*, Locomotive No. 1 at Carbondale. Illustrative of railroad development in the past 50 years, he remarks that the ‘Major’ could haul only 18 of the 5-ton Gravity cars at a time, whereas one of the 1600-class Mallets would have been able to walk away with the entire rolling stock of about 4,800 cars, owned by the Gravity—if they had held together! . . .] Another locomotive, the “C. P. Wurts,” [D&H Engine No. 2, Gravity gauge, built in 1860 for use on the Valley Road, 4-4-0, built by W. Cooke & Co., and sold to the Dickson Manufacturing Works in 1874] was now built for passenger service, though she too hauled coal to the foot of No. 23 when necessary. The next engine completed was the “Terrapin,” [D&H Engine No. 3, 0-4-0, built in 1861 by W. Cooke & Co., retired 1899] changed to “Col. Ellsworth,” soon after that brave officers [sic] assassination in Alexandria, VA. She was next called the “Fire Plume,” and is now doing duty on the company’s docks in Honesdale under the name “Honesdale.” She was too small for the work at Olyphant, and was kept there only a short time. The “Lackawanna” [D&H Engine No. 4 and

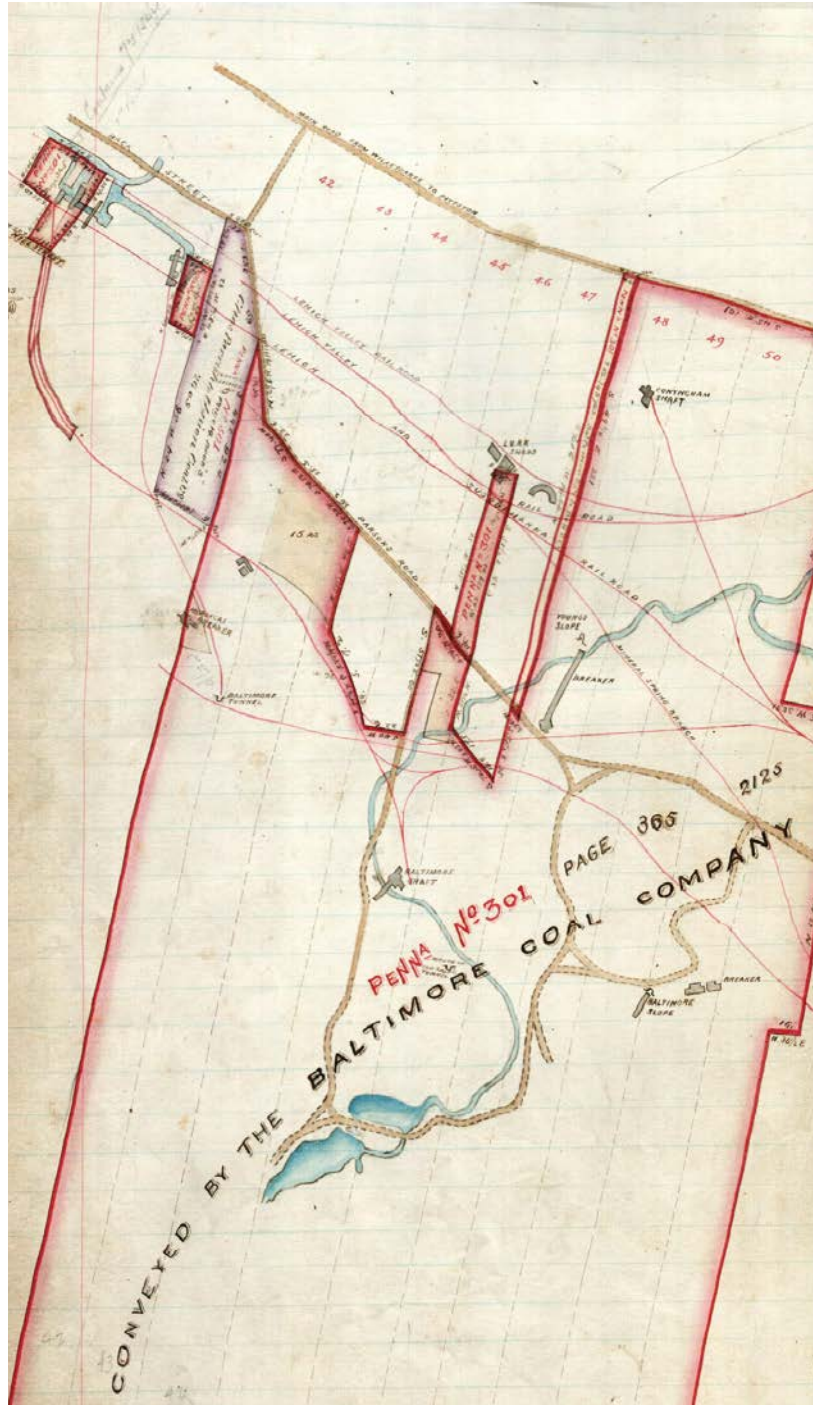
Dickson No. 1, 0-6-0, built 1862, scrapped 1899] was next built for use between Olyphant and the mines. She also was sent to Honesdale, and is still here. All of the engines built prior to the extension of the line to Vine street, Scranton, in 1863, were transported from the Dickson works to Providence on heavy wagons, drawn by horses and mules."

Maps showing Baltimore Coal Company properties in Luzerne County in 1867:

In the *D. & H. Deed Book – Luzerne 2*, on pages 376-77, there are maps that illustrate the deed, pp. 365-75, dated October 15, 1867, between the Baltimore Coal Company and The Delaware & Hudson Canal Company. On those maps, the Baltimore Shaft and Tunnel, the Mordecai Breaker, the Lehigh Valley Railroad & Shops, and the Lehigh and Susquehanna Railroad are shown. Here are those maps:

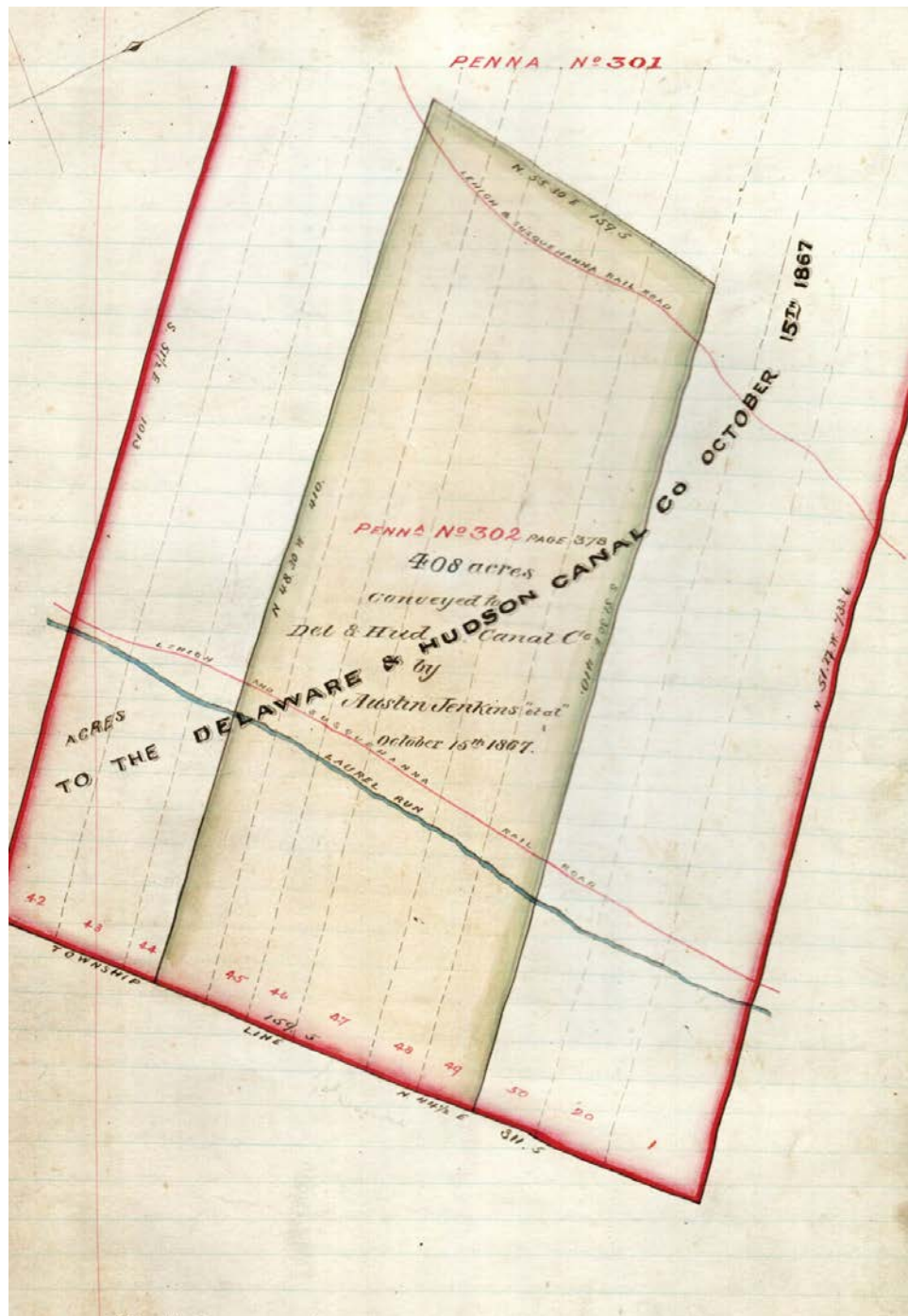
First, we have two views of the entire map:

The top:

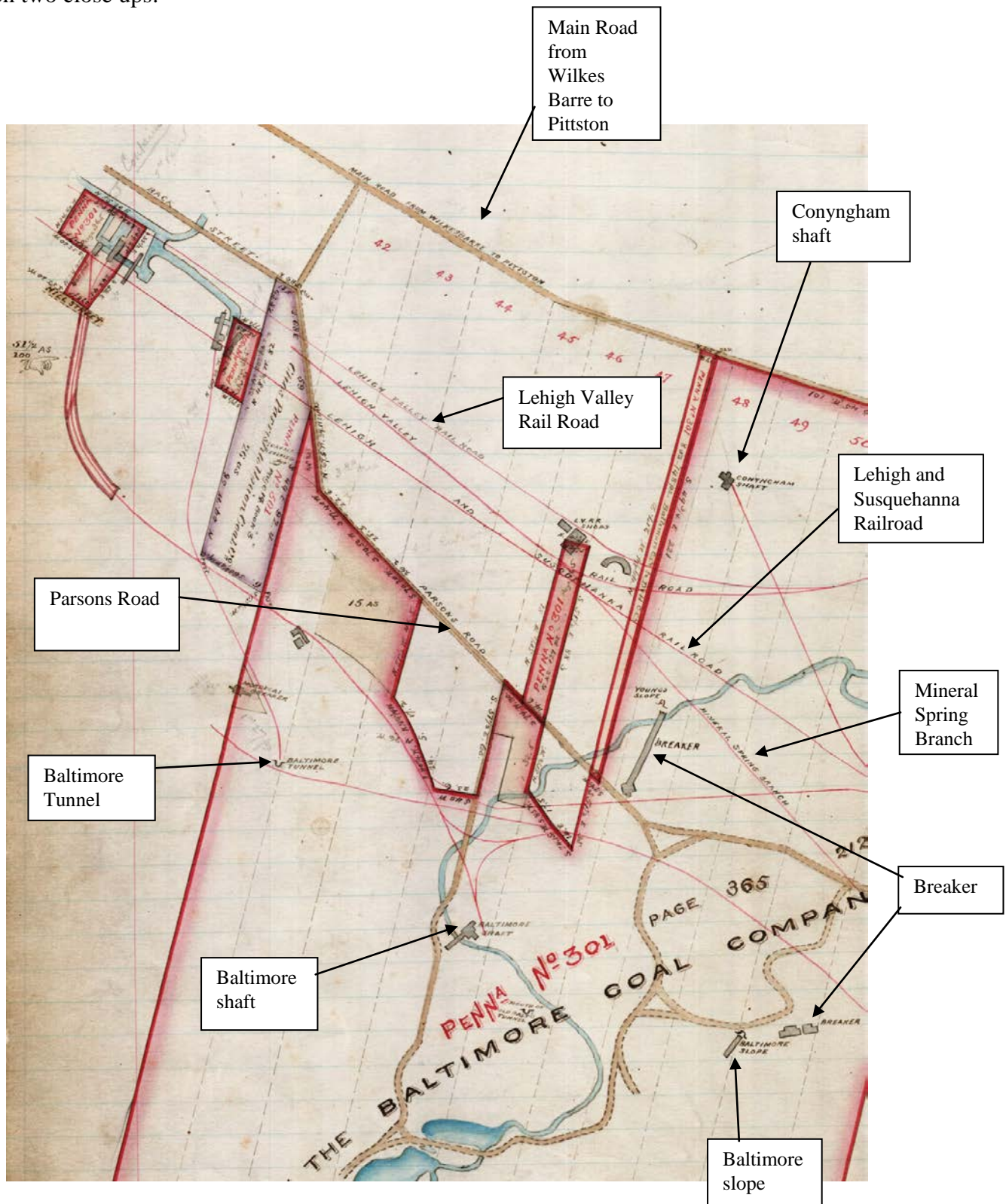


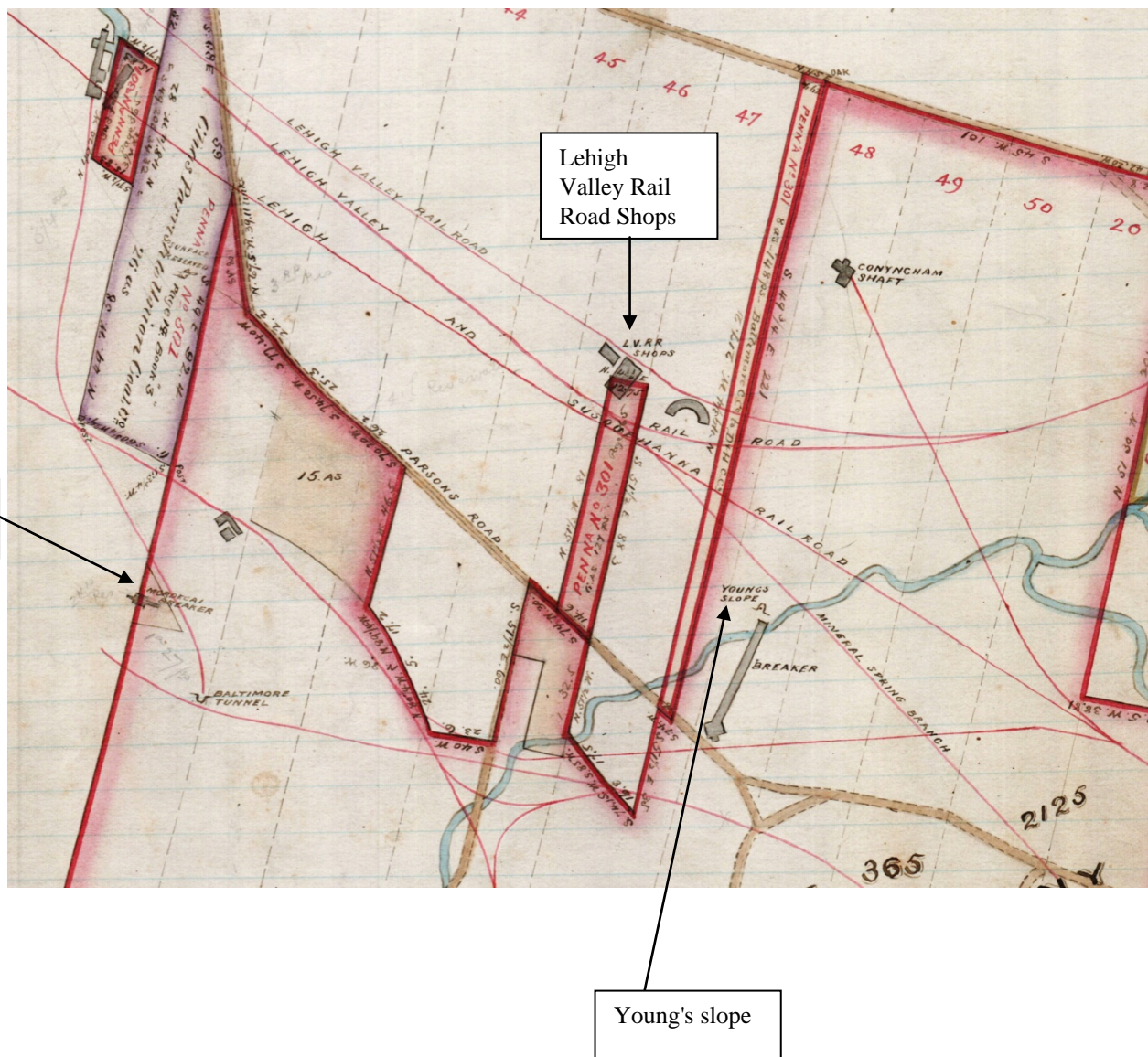
The bottom:

"408 acres conveyed to Del & Hud Canal Co by Austin Jenkins et al October 15th 1867"



Then two close ups:





These same sites are seen on the 1894 maps of Luzerne and Lackawanna Counties that were compiled and published by G. W. Baist. Here is the Baist map for the Baltimore mines area of Wilkes-Barre:

Rivalry between two coal shippers: the D&H and the Lehigh Coal & Navigation Company:
 "RAILROADS, CANALS, COAL AND TRANSPORTATION.--Wilkes-Barre, April 11.-- / The Lehigh Coal & Navigation Company are in a sort of a squabble just now, which prevents the operators of the Plymouth region from getting cars in which to ship coal. It appears that under the monopoly combination which secures the southern coal market to the Delaware & Hudson Coal company, there is an arrangement, in effect that if the Lehigh Coal & Navigation Company will allow the Delaware & Hudson Coal Company to run their cars over a certain piece of track which they are compelled to use from the situation of their mines, they will allow the Lehigh Coal & Navigation Company to run their cars across the Plymouth bridge, and thus accommodate their customers who are sending coal into the Eastern market. The arrangement has worked satisfactorily, but now that the Lehigh Coal & Navigation Company, having run several hundred more cars across the bridge than the Delaware & Hudson Coal company have run over their track, they refuse to send any more over until the Del. & Hudson Coal company catch up. The operators are therefore deprived of cars, and quite a number, among them Messrs. Broderick & Co., have been compelled to lie idle a part of the time. It is not known how long the trouble will last. . .--*Scranton Republican*." (*Carbondale Advance*, April 23, 1870, p. 3)

The 20-year lease by the Lehigh Coal & Navigation Company/ C. R. R. of N. J. of the right to run passenger and merchandise traffic over the Union Railroad (Wilkes-Barre: Mill Creek to Scranton: Green Ridge) to expire in November 1886, and the D&H have control of the road:

"The Del. & Hud. Canal Co.'s Railroads. / Next Saturday night at twelve o'clock the twenty years lease of the Union Railroad from Scranton to Mill Creek to the Lehigh Coal & Navigation Co. expires, and the control of the road returns to its owners, the Delaware & Hudson Canal Co. During the twenty years the management of the passenger and freight business of this short but important railroad link has been operated successively by three different companies—the Lehigh & Susquehanna, the Central of New Jersey, and the Philadelphia & Reading. These twenty years have seen a wonderful growth in business enterprise and population in the two valleys which the Union Railroad connects, and what seemed then of minor importance, is now a most valuable branch of the Delaware & Hudson railroad system. The Delaware & Hudson Canal Co. will take possession of the Union Railroad, as before stated, next Sunday. They have built an extension from Mill Creek to the Lehigh Valley depot in Wilkes-Barre, and on Monday next will run their passenger and freight business from the city to Wilkes-Barre. A rearrangement of the passenger trains on the new time table goes into effect next week, as follows: / On and after Monday next, passenger trains will leave Carbondale for Scranton at 7.00, 8.20, 9.50, and 11.20 a. m., 1.00, 3.46, 5.20. and 8.15 p.m. / Trains will leave Scranton for Carbondale at 7.00, 8.40, 10.00, and 11.47 a.m., 2.10, 5.00, 7.00, and 11.05 p.m. / All trains except the 7.00 a.m. from Scranton and the 9.50 a.m. from this city will run through coaches between Wilkes-Barre and Carbondale. / The train leaving here at 8.15 p.m. will run through to Wilkes-Barre, reaching that city at 9.50 p.m. Returning, it will leave Wilkes-Barre at 10.15 p.m., and reaching this city at 11.50 p.m. Passengers to and from Scranton on this train will go to the Bridge street depot, the old L. & S. station, near the Stone bridge Scranton. / The principal changes from the present time of trains between here and Scranton are that the first train from Scranton in the morning will leave that

city at 7.00 and reach this city at 7.50, and that the last train at night from Carbondale will leave at 8.15. The Saratoga Express will leave this city at 11.00 a.m. instead of 6.03; the present 11.25 a.m. train will leave five minutes earlier--11.20; the old evening train from Scranton will leave that city at 7.00 instead of 7.10 p.m. / The Company will run seven trains each way between Scranton and Wilkes-Barre." (*The Journal*, November 4, 1886, p. 3)

6802

Thomas Dickson Elected President of D&H

In a leadership position at the D&H from 1860 until his death in 1884 was Thomas Dickson:

1860: Thomas Dickson appointed Superintendent of the Coal Department at annual salary of \$4,000. Immediately he set about acquiring coal lands, especially those on the east side of the Susquehanna River extending north from Nanticoke to the Pennsylvania Coal Company property near Wilkes-Barre.

1864-1865: Thomas Dickson promoted from the position of Superintendent of the Coal Department to the newly created office of General Superintendent of the Delaware and Hudson Canal Company. As General Superintendent, he was in charge of all operations from Scranton to Rondout, including mining, the railroad, the canal, and the telegraph departments.

1866 (January 16): Thomas Dickson elected Vice President of the D&H:

"We learn with pleasure that Thomas Dickson, Esq. for the past two years General Superintendent of the Del. & Hud. C. Co. has been elected Vice President of the Company. We hope this new official position will not be incompatible with his former one. We should regret to have him withdraw from that, or remove from our country." (*Carbondale Advance*, Saturday, February 10, 1866, p. 2)

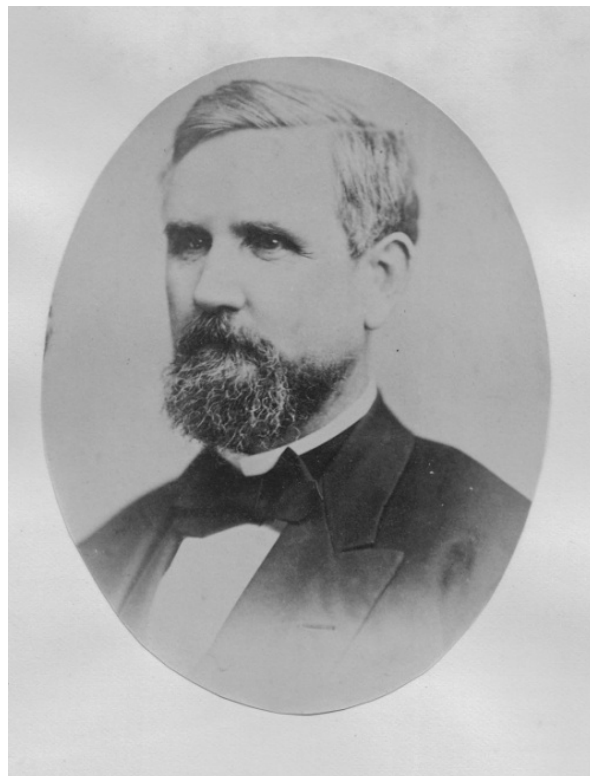
1869 (May 13): elected President of the D&H; served until his death, on July 31, 1884.

With the D&H mining-transportation-marketing system now fully mature, it was destiny that placed Thomas Dickson at the head of the Company. Under his leadership as President, the D&H ascended to yet new heights.

Here is the engraved likeness of Thomas Dickson in 1857 (at age 33), that is given, facing page 34 of *The Life of Thomas Dickson A Memorial* (Samuel C. Logan, D. D., Scranton, PA, 1888).



Here is the portrait of Thomas Dickson that is given facing page 157 in J. A. Clark's monumental *The Wyoming Valley, Upper Waters of the Susquehanna, and the Lackawanna Coal-Region Including Views of the Natural Scenery of Northern Pennsylvania, From the Indian Occupancy to the year 1875* (Scranton: J. A. Clark, Publisher, 1875), pp. 155-158.



Here is the biographical portrait of Thomas Dickson from Clark's monumental work.

CHAPTER XXIX.

THOMAS DICKSON, PRESIDENT OF THE DELAWARE & HUDSON CANAL COMPANY.

"The rank is but the guinea stamp,
The man's the gowd for a' that."
—BURNS.

The subject of this sketch is a Scotchman by birth, being born in the year 1824, at Berwickshire. He emigrated with his father's family to Canada in the summer of 1832, where they remained two years, and in 1834 came to Carbondale, settling on a farm two miles west of Dundaff, Susquehanna County. Two years later the family located in Carbondale, where the father, James Dickson, entered the service of the Canal Company as a machinist. He was subsequently made master-mechanic, a position which he has occupied continually to the present time.

Thomas learned to read and write in Scotland; attended school in Canada, and in Carbondale, until the winter of 1837, when he had a quarrel with his school-master—the only one in the place—which resulted in a determination to leave, and being unwilling to remain a burden on his parents, offered his services to George A. Whiting, who was then in charge of the horses and mules of the Canal Company.

His services were accepted, and he was engaged in driving in and about the mines of the company during the summer of 1837. In the winter of 1837-8 he again resumed his studies at school, and in the spring entered the store of Charles T. Pierson, of Carbondale, as a clerk.

The following year, Pierson sold out his interest to Joseph Benjamin, Dickson being transferred with the stock. He remained with Benjamin as a clerk, until 1843, when he was again

transferred to F. P. Grow & Brothers, who purchased the goods. Hon. Galusha A. Grow, who afterward became a national historical character, was one of the brothers.

In 1845, he entered into co-partnership with his former master, Joseph Benjamin, where he remained until 1852, when he purchased an interest in the foundry and machine shops, then known as J. Benjamin & Co., now as Van Bergen & Company.

In 1856, Mr. Dickson came to Scranton, and established the Dickson Manufacturing Company, with a capital of \$30,000, which was increased to \$75,000 before they started the workings of the enterprise. The capital and surplus now employed is about one-and-a-half millions, and the institution itself ranks among the best of the kind in the country. A more full description in detail may be found in the chapter under that head. The original design was merely that of manufacturing mining machinery, but the magnificent locomotives which leave their hands attest remarkably the prosperous growth of the company. Mr. Dickson remained in the concern as manager, until January 1st, 1860, then retired, his brother George L. Dickson, taking his place.

At this time he went into the Canal Company as Superintendent of the Coal Department, and in 1864 was made General Superintendent of the Delaware & Hudson, in all of its extensive ramifications. In 1867 he was elected Vice-Presi-

dent, and in 1869, President, a position which he still retains. Such a business career is remarkable in no small degree, and few instances are found which can compare to it in magnitude of interest. When he took charge of the Canal Company, the operations were confined north of Olyphant, and the entire production never exceeded a half million tonnage. The transportation to tide water was by canal exclusively, and passengers were moved by stages between Carbondale and Scranton. Since that time, and under Mr. Dickson's faithful administration the increase has been regular, until the present productive capacity is about 4,000,000 tons per annum, and the mining operations extend from Carbondale on the north, to Plymouth on the south.

The first year after being President, the company obtained by lease the perpetuity of the Albany & Susquehanna Railroad, stretching from Binghamton to Albany, with all of its branches, and in the subsequent year the Rensselaer & Saratoga Railroad and its branches, together with the line of steamers on Lake Champlain, and for the purpose of connecting the entire railroad system, obtained by purchase, the Union Railroad between Wilkes-Barre and Scranton, constructed the road between Scranton and Carbondale, and obtained a control over the Jefferson Branch to Susquehanna, and from thence to Nineveh by construction again, connecting the coal fields with the railroad system north and east into New England.

At present the company is building the New York & Canada road, on the west shore of Lake Champlain, connecting with the Rensselaer & Saratoga road at Whitehall, and with the Grand Trunk at the Canada line. The road is now open to Port Henry on Lake Champlain, and will be completed to Rouse's Point during the present season (1874-5), making in all, railroad connection from the mines to Montreal.

The Delaware & Hudson Canal Company thus has an ownership of seven hundred miles of railway, one hundred and eight miles of canal, and the Steamer lines on Lakes Champlain and George.

The first improvement between Scranton and

Carbondale was a plank road, and was constructed under the supervision of Mr. Dickson. He was one of the original parties in the organization of the Moosic Powder Company; was one of the parties in the organization of the First National Bank of the City of Scranton, and now a Director; was also one of the parties in the organization of the Scranton Trust Company and Savings Bank, of which he is now an officer; he furnished the machinery, and was an original stockholder in the Gas and Water Company of Scranton, now a Director; at one time was a Director in the Pittston Bank; is a stock-holder and Director in the Lackawanna Iron & Coal Company; a stock-holder and Director in the Oxford Iron Works of New Jersey; he is a Director in the New York Mutual Life Insurance Company of New York, the largest and most extensive in the country; also occupies the same relation to the Merchants & Manufacturers Insurance Company of Newark, New Jersey. He is also interested as a Director in a couple of furnaces at Albany, the Alcott Iron Manufacturing Company, as well as in a coal road and Iron Mining Company in southern Illinois, and the railroad connecting with the Mississippi river, and in some of the western railroads as a stock-holder. He owns also what is known as the Dickson Tract, an addition to the City of Scranton, extending from the Lackawanna river to the Borough of Dunmore, which has been surveyed into lots, and which is, in itself, at Scranton real estate figures, a fortune of no ordinary magnitude.

In the year 1872, Mr. Dickson, accompanied by his wife and son made a journey around the world, gathering in with his practical eye information and knowledge which would have escaped a tourist of less expanded ideas. Since his return he has contributed by Lectures on "Round the world" and "What I saw in India," to choice audiences in the Opera House in Scranton, the proceeds going to charitable purposes.

When he returned from Great Britain, after an extensive inspection of its mineral resources and manufacturing interests, and knowing well the comparative resources of our own country, he proceeded to Lake Champlain and became

interested in the purchase of twenty-three thousand acres of iron-ore lands, organizing a company with one and a half million dollars capital, about three hundred thousand dollars of which stock is held in Scranton. Two furnaces have been erected which are in successful operation, and fifteen miles of narrow-gauge railroad has been built connecting the mines with the lakes, and the New York and Canada road; the company has in addition, demonstrated that the ore is suited for Bessemer Steel purposes, being equal to the best English pig, indeed it is conceded by English experts and iron-masters that the Crown Point ores are fully equal to any of the Bessemer ores to be found on the Island of Great Britain; and that they have none better and very little equal to it.

The mines are now open to an extent that gives a productive capacity of 300,000 tons per annum, and it is expected that the new steel works now being established by the Lackawanna Iron & Coal Company will use these ores largely, if not exclusively.

To form a proper appreciation of the duties which devolve upon Mr. Dickson as President of the Delaware and Hudson Canal Company, let it be understood that the Lackawanna Valley produces about twelve millions of tons of coal per annum, and the company referred to can produce about one-fourth of it. In the Wyoming Valley twenty-eight breakers are owned or controlled by the company, and in the working of all these, in addition to his railroad studies, Mr. Dickson is thoroughly familiar. His early life and its practical experience qualifies him to meet these burdensome duties, in an eminent degree. It is a common saying by the multitudes of people in the Lackawanna Valley, "I'd give more for Tom Dickson's opinion on coal matters than any other railroad man in Northern Pennsylvania."

It cannot be denied that he is certainly master of his grand tasks, and as sound in theory as he has been tested by practice. Under his present administration, the company is doing its utmost to stretch its arms out into regions where the whistles of the locomotive has never been heard, thus making an outlet for the coal, which it is in the power of the Delaware & Hudson Canal

Company to produce. As a rule, Mr. Dickson informed the writer, in opening up a new country by pushing a railroad into it, it is calculated that the company will be able to sell in each town one ton to an inhabitant per year; thus, in the United States there is consumed each year forty millions of tons, both hard and soft coal. A corporation, like an individual, must keep pace, or fall behind, and as will be gathered from the facts already given, no efforts have been spared since the commencement of his presidential career, to reach New England and Canada. His chances of observation in Great Britain and on the continent gives him broad and expanding ideas in railroad building, which are of material benefit to the company. In relation to the so-called combination, his opinion, in summary is as follows: During the war the production of coal was stimulated by the heavy demands made by the manufacturing and other interests which were incident to the times, and at the conclusion of the struggle the companies found themselves with a productive capacity of more than sufficient for the demand. The effect, of course, was apparent—supply in excess of demand—ruinous prices, followed by strikes and coal-famines. One instance is related by him when coal in the spring sold at three dollars per ton, in the fall of the same year for thirteen dollars. In 1872, money was lost by all companies, in consequence of an over production, and with a view of regulating the supply to the demand, an arrangement was entered into in order to meet the exigencies, and the price of coal has been maintained at an average of five dollars per ton at tide-water, during the past two years, thus proving in reality a benefit to both consumer and producer.

In the difficulties which occasionally occur in mining regions, wherein labor pits itself against capital, the Delaware & Hudson Company have ever been fortunate in possessing such a spirit as Thomas Dickson to adjust the matters at variance. He has a hold upon the affections of the miners which is marvelous, and in no instance do they ever disregard his counsel. There have occurred occasions in which his timely suggestions have relieved the minds of the people along the whole Valley, such for instance, as the matter in dis-

pute concerning the titles to the miner's lands in Carbondale a short time ago.

As a citizen, Mr. Dickson stands prominent in the hearts of the people for all that ennobles and elevates manhood. Always liberal, he is never known to disregard an appeal which embodies the least degree of merit. As an exemplary christian, and a supporter of his church--the Presbyterian, he stands in the front rank, commanding the respect of all who are associated with him. He is still in the vigor of manhood, and with the great resources which yet remain to be developed, the country could illy afford to loose his services for years to come.

A mule driver in the Anthracite coal mines in the year 1837, and President of the Delaware & Hudson Canal Company, one of the largest railroad and transportation companies on the American continent in 1869, affords a striking contrast indeed; but in importance as a subject for

thought, it is powerful in its application to republican institutions. From the *Westminster Review*, to the editorials of the provincial papers, students of political economy traverse the vexed question of capital and labor, and expend their fulsome theories in vain to solve the never-ending controversy, but as a practical solution of the entire subject, we present herewith a man who concludes the argument by affording an example strictly in point. The elaborate articles of magazine literature will drift to this point in spite of syllogisms scattered over acres of white paper. Thomas Dickson made himself, and every citizen, though the higher plane occupied by him may not be reached, can do the same. He started from nothing and is where he stands today. The same chance is open to all, and when seized upon in the proper spirit, the struggle between capital and labor will end.

The photograph of Thomas Dickson given above on page 92 is one of the many photographs by Wm. H. Schurch in J. A. Clark's important work, which was published in book form in 1875 in Scranton. The following announcement of the forthcoming publishing of Clark's book is given in the *Carbondale Leader* of August 9, 1873, p. 3:

"THE WYOMING VALLEY, / UPPER WATERS OF THE / SUSQUEHANNA, AND THE LACKAWANNA COAL REGION, / Including Views of the Natural Scenery of /Northern Pennsylvania." Photographically Illustrated by Wm. H. Schurch. / To be published in monthly parts, each part containing two large Photographic Views, taken from the Wyoming Valley, Upper Waters of the Susquehanna, or the Lackawanna Coal Region. / To render the work an attractive ornament for the Parlor and Library, the Publisher will spare neither pains nor expense in procuring suitable embellishments and choice Views, accompanied by Historical and Biographical Notices of Places, Men, and Events connected with the history of Northeastern Pennsylvania. / The work will not be stereotyped, consequently if you need the work, NOW is

the only opportunity to subscribe. / No better or more pleasing Gift could be sent to your relative in the Old Country, and distant States, than the Pictorial history of your own home and vicinity. / The Views in each number retail at \$1. We sell the entire number with Thirty-two pages of historical reading matter for Fifty Cents. / CONDITIONS OF PUBLICATION. / The work will be fully completed in Fifteen Monthly Parts, at Fifty Cents each, containing in all Thirty Large, Cabinet size Photographs. / The parts are payable on delivery, the Carrier or Agent not being allowed to give credit. / PUBLISHER'S CARD. / The forthcoming History of the Wyoming Valley, Upper Water of the Susquehanna, and the Lackawanna Coal Region, which is to be photographically illustrated, will, in its reading mater also, as near as can be, by the ability of the editor, be a perfect photograph of the entire region, as named,--not a history simply of the early days of the Valley, the volume burdened with Indian names and derivations, but as before expressed, a *perfect photograph* of Northeastern Pennsylvania, the pioneer in the perspective, the grand industries, mammoth enterprises, and natural beauties in the foreground. The pen will accompany the camera, in its tour around this section of the State, merely serving as an aid, to elaborate where the obstacles cut off the view, and to finish up incomplete prints. / J. A. CLARK. / Subscription books are open in this city [Carbondale] at Jadwin & Aitken's book and drug store. / 63"

The Clark book was sold at Jadwin's Drug Store in Carbondale, which is shown in the stereoview given below in the collection of the Carbondale Historical Society and Museum, Inc.



Here is the portrait of Thomas Dickson that is given in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 502-503:

Biographical Portrait of

THOMAS DICKSON

Portrait and Biographical Record

Of Lackawanna County Pennsylvania,

1897, pp. 502-503

THOMAS DICKSON. During the temporary sojourn of James and Elizabeth (Linen) Dickson in Leeds, England, their first child, Thomas, was born March 26, 1824. As they were from the burgh of Lauder, county of Berwick, Scotland, their son always claimed to be a Scotchman and was justly proud of his ancestors, who laid the foundation of Scottish civilization and greatness. His grandfather, Thomas Dickson, served for twenty years as a member of the Ninety-second Regiment of Highlanders. At fifteen he married, and when sixteen was a father. Soon afterward he entered the army and served his country through the Napoleonic wars, taking part in the Peninsular campaign, when the French, under Jerome Bonaparte, were driven from Spain. During the famous battle of Waterloo, he was one of the immovable soldiers and when the day was won he and two others of his company were found standing full armed. Medals and other decorations which he received from the British government contained the names of fifty-two battles in which he took a brave part, and these are still in the possession of the family, souvenirs of which they are justly proud.

In 1832 James Dickson, with his wife and a brother-in-law, John Linen, sailed from Glasgow for the new world of America. For nine weeks they were upon the ocean, driven hither and thither by severe storms, but at last anchored in the mouth of the St. Lawrence River. With other passengers they were transferred to boats and towed up current by oxen walking along the bank. For a time the family stopped in Toronto, but, finding no work there, they left in 1834, migrating to the foot of Elk Mountain in northern Pennsylvania. Here the family was left in

charge of our subject, while the father went to New York to see if he could get work at his trade, that of a millwright. The result being satisfactory, he spent two winters and one summer there in profitable employment, and then returned to Dundaff, where he had left the family.

It was Mr. Dickson's intention to return to New York, but the Delaware & Hudson Canal Company, learning that he was a skilled mechanic, offered him a position which he accepted. In the spring of 1836 he came to Carbondale, accompanied by his wife and six children. Soon afterward he was made master mechanic, a position which he held until his death in 1880. Much of his success was due to his wife, who was a woman of more than ordinary energy and capability, possessing dauntless courage that never wavered in the midst of poverty, suffering and hardships. It is said of her that often at night, holding an umbrella over her so as to screen the light from her sleeping husband and children, she cut and sewed garments for them, laboring incessantly for their happiness and comfort.

As might be supposed, the stirring scenes and experiences that became familiar to our subject in early life had a formative influence upon his character. They taught him many hard, but important, lessons in patience and perseverance, that in after years bore fruit in his successful career. In later life he often found a pleasant relaxation from heavy business cares in reverting to the trying times when he was snowed in among the bleak gray hills of Dundaff. In early days his educational advantages were limited to a brief attendance at schools taught in log cabins with greased paper for window panes and rude benches for seats. A few days after entering the Carbondale school, trouble with the teacher caused his father to say that he must either apologize or go to work. Choosing the latter alternative, he began as a mule driver with the Delaware & Hudson Canal Company and afterward was employed as clerk in a general store at Carbondale. Meantime, realizing his need of more knowledge, he attended evening schools and became an active worker in local debating clubs, thereby gaining a fund of information that was most helpful afterward.

While clerking in the store, Mr. Dickson began an independent business venture, his first. At his own expense he bought a few books and let them out for a small fee, establishing a circulating library that proved a benefit to the entire place. Himself a man of broad learning, his special fondness was for the old Scotch bards, though he was familiar with poets of all ages and countries. As the years went by he added to his stock of books and at his death left one of the finest private libraries of standard works in the entire state. Until 1856 he was a partner in the store and saw a rapid growth of the business, particularly of the iron department.

In company with father, brothers and friends, in 1856 Mr. Dickson established the firm of Dickson & Co., and located the plant in Scranton. In 1862 the company was reorganized under its present title, Dickson Manufacturing Company, with Thomas as president and sole manager. About 1859 he was appointed coal superintendent of the Delaware & Hudson Canal Company, who were the principal customers of the Dickson Manufacturing Company. These two positions he held during the war, when all business in their line was largely increased, but in May, 1867, he resigned in favor of his brother, George L. Afterward he gave his time to the Delaware & Hudson Canal Company, in opening coal mines and building railroads. In October, 1863, he assisted in organizing the First National Bank of Scranton, which has since been one of the most substantial banking concerns of this section, and in it he continued as a director until his death. He assisted in the organization of the Moosic Powder Company April 22, 1865, and was a director in it until he died. In 1867 he was elected vice-president of the Delaware & Hudson Canal Company and two years later became president, which office he held the remainder of his life.

August 31, 1846, Mr. Dickson married Mary Augusta Marvine, daughter of Deacon Roswell E. and Sophia (Raymond) Marvine, natives of New York. This lady is still living and spends her summers in Morristown, N. J., where she owns a beautiful country seat of fifty acres; during the balance of the year she resides in Scranton. At Morristown Mr. Dickson passed away, July

31, 1884. His body was brought to Scranton, where it lay in state for two days, and was then interred in Dunmore cemetery. Thus closed a life that was eminently successful, not only from a financial point of view, but in the larger and broader sense of years well spent and time nobly conserved. Benevolent in disposition, he was yet unostentatious, and preferred to dispense his charities quietly. The poor often received substantial assistance from him, churches numbered him among their largest benefactors, public institutions were indebted to him for philanthropies, progressive enterprises felt the impetus of his generous donations, and, in fact, everything calculated to uplift mankind and elevate humanity found in him a friend. Whatever success he achieved, whatever property he acquired, whatever influence his noble character exerted, is, humanly speaking, the result of his own ambition and effort, and very justly he is given a permanent place among the men whose memory is cherished by the people of the county.

Biographical Portrait in Stoddard

A biographical portrait of Thomas Dickson is given on page iv of Dwight Stoddard's 1906 *Prominent Men*. Here is that portrait: "Born Landerdale, Scotland, March 26, 1824--July 31, 1884. Edu. Public Schools Scotland and America. Married Mary Marvin, Aug. 31, 1846. Pres. D. & H. Co., 1869-1884. Coal Operator. In 1856 Established Dickson & Co., Manfrs., located in Scranton. Reorganized under title, Dickson Manufacturing Co. One of the Organizers and Directors First Nat. Bank and Moosic Powder Co."

It's "Lauderdale" not "Landerdale," its "Marvine" not "Marvin." Dickson family came to Canada when Thomas was 9, to Dundaff in 1834, to Carbondale in 1836. Mary Augusta Marvine was the daughter of Roswell E. Marvine and Sophia Raymond.

Thomas Dickson: Scottish or English

In Miller and Sharpless' excellent book, pp. 67-68, Thomas Dickson is identified as being English. To be sure, he was born in Leeds, England, on March 26, 1824, during the temporary residence of the Dickson family there, but Dickson always regarded himself as a native of Lauder, Berwickshire, Scotland.

In Logan's *The Life of Thomas Dickson. A Memorial*, pp. 6-7, we read: ". . . Thomas [Dickson] always reckoned himself a Scotchman, both geographically and by blood. He defended his birthright by asserting that if he had been born in a sty it would not make him a pig; or if he had arrived in the world beside a mill-pond, and had learned to swim before he migrated, it could hardly make him a goose."

Logan, p. 7: "He [Thomas Dickson] was a scion of one of those Presbyterian families which laid the broad foundations of the Scottish civilization and greatness. He inherited a name and a blood which is traceable backward through many generations, and which comes to the surface with conspicuous distinctness in the special times of exigency and of heroic sacrifice for the right, in Scottish history."

Thomas Dickson's D&H Career

Summary Statement

1824 (March 26): Thomas Dickson born

Thomas Dickson, as it stated in his biographical portrait given here, was born in 1824. In that year, as it turns out, an amazing group of D&H leaders were also born. This we learn from an article that was reprinted (from the Honesdale Citizen) in the *Carbondale Leader* of December 9, 1881:

“Thomas Dickson, President of the Del. & Hud. C. Co.; R. M. Olyphant, Vice President; Coe F. Young, General Manager; A. H. Vandling, Superintendent of Coal Department; R. Manville, Superintendent of the Pennsylvania Railroad Division; E. W. Weston, Real Estate Agent, were all born in 1824, the year the first shovelful of earth was turned to commence the Del. & Hud. Canal. This is a very remarkable and singular coincidence.—*Honesdale Citizen*.” (*Carbondale Leader*, December 9, 1881, p. 4)

1837: Thomas Dickson worked for George A. Whiting, who was in charge of the horses and mules for the D&H. Thomas Dickson was hired to drive the very large mule harnessed at the sweep, which was used for lifting coal out of the mine at Carbondale.

1846 (August 31): Thomas Dickson married Mary Augusta Marvine, the daughter of Deacon Roswell E. and Sophia (Raymond) Marvine, natives of New York.

1860: Thomas Dickson appointed Superintendent of the Coal Department at annual salary of \$4,000. Immediately he set about acquiring coal lands, especially those on the east side of the Susquehanna River extending north from Nanticoke to the Pennsylvania Coal Company near Wilkes-Barre.

1864-1865: Thomas Dickson promoted from the position of Superintendent of the Coal Department to the newly created office of General Superintendent of the Delaware and Hudson Canal Company. As General Superintendent, he was in charge of all operations from Scranton to Rondout, including mining, the railroad, the canal, and the telegraph departments.

1866 (January 16): Thomas Dickson elected Vice President of the D&H

"We learn with pleasure that Thomas Dickson, Esq. for the past two years General Superintendent of the Del. & Hud. C. Co. has been elected Vice President of the Company. We hope this new official position will not be incompatible with his former one. We should regret to have him withdraw from that, or remove from our country." (*Carbondale Advance*, Saturday, February 10, 1866, p. 2)

1869 (May 13): elected President of the D&H; served until his death, on July 31, 1884.

1872: Thomas Dickson and his wife and son do a round-the-world tour

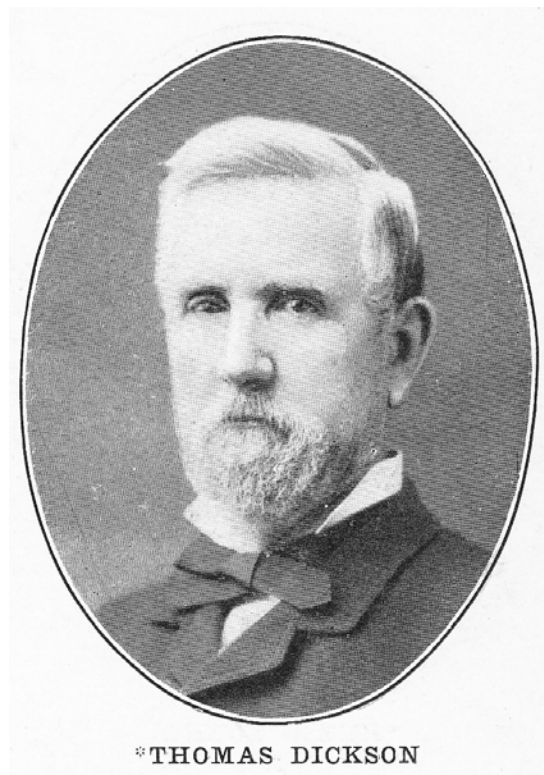
1884 (May 14): Thomas Dickson re-elected President of the D&H

1884 (July 31): death of Thomas Dickson, who was serving as president of the D&H at the time.

What Thomas Dickson accomplished as President of the D&H:

In the biographical portrait of Thomas Dickson in *Clark*, on page 155, we read: "The first year after being President, the company obtained by lease the perpetuity of the Albany & Susquehanna Railroad, stretching from Binghamton to Albany, with all of its branches, and in the subsequent year the Rensselaer & Saratoga Railroad and its branches, together with the line of streamers on Lake Champlain, and for the purpose of connecting the entire railroad system, obtained by purchase, the Union Railroad between Wilkes-Barre and Scranton, constructed the road between Scranton and Carbondale, and obtained a control over the Jefferson Branch to Susquehanna, and from thence to Nineveh by construction again, connecting the coal fields with the railroad system north and east into New England. / At present [1875] the company is building the New York & Canada road, on the west shore of Lake Champlain, connecting with the Rensselaer & Saratoga road at Whitehall, and with the Grand Trunk at the Canada line. The road is now open to Port Henry on Lake Champlain, and will be completed to Rouse's Point during the present season (1874-75), making in all, railroad connections from the mines to Montreal. / The Delaware & Hudson Canal Company thus has an ownership of seven hundred miles of railroad, one hundred and eight miles of canal, and the Steamer lines on Lakes Champlain and George."

Here is the photograph of Thomas Dickson that is given on page 16 of Stoddard's 1906 *Prominent Men*:



*THOMAS DICKSON

Here is the 1883 photograph of Thomas Dickson that is given facing p. 96 of *The Life of Thomas Dickson. A Memorial*. By Samuel C. Logan, D. D., Scranton, 1888.



THOS. DICKSON.

1883.

Death of Thomas Dickson

1873: [Thomas Dickson] **“Health of Thomas Dickson, Esq.** / It is known to most of our readers that Thomas Dickson, Esq., President of the Del. & Hud. C. Co., has been suffering from illness in New York. He contracted a severe cold, and was seriously threatened with Inflammation of the Lungs. All will be glad to learn that he has much improved, and expected to be able to return to his home in Scranton the present week.” (*Carbondale Advance*, January 25, 1873, p. 3)

April 23, 1884: Thomas Dickson’s serious illness reported to Board of Managers:

“Serious Illness of President Dickson. / Advices were received here on Monday from Morristown, N. J., that Thos. Dickson, Esq., President of the D. & H. C. Co., had a serious relapse on that day, and summoning his relatives from this place and Scranton. On Tuesday morning his condition was more comfortable, but there is little hope of his recovery. During Wednesday he was worse, but Wednesday evening had again rallied.” (*Carbondale Advance*, August 2, 1884) [Thomas Dickson died on July 31 and this notice of his illness was in the *Advance* following his death.]

1884: Death of Thomas Dickson:

Thomas Dickson was re-elected president of the D&H on May 14, 1884. On July 31, 1884 he died. In *Delaware & Hudson*, Jim Shaughnessy says this (p. 177) of Thomas Dickson: “The passing of Thomas Dickson was an especially sad occurrence for the D&H as he, more than any other man in the past or future history of the company, was responsible for shaping both the map and the destiny of the organization. It was through his efforts and with his untiring guidance that the D&H embarked on its railroad career. Then, after building some lines and leasing others, he sewed the parts together with interconnecting stretches of track to form a unified, efficient and smooth-working network stretching out from the mines in Pennsylvania to wide areas of the northeast and New England.”

Death of Thomas Dickson as reported in the *Carbondale Advance*:

“THOMAS DICKSON. / Death of the President of the Delaware and Hudson Canal Company. / A SKETCH OF HIS LIFE. / THE FUNERAL OBSEQUIES, &c., &c. / On Thursday evening last, July 31st, at 8.40 o’clock, Thomas Dickson, President of the Del. & Hud. Canal Co., passed away from earth in the prime of his manhood and in the midst of his usefulness, aged nearly sixty years. A great and good man has fallen. Shrewd in business, far-seeing as president of a large and prosperous corporation, a friend of the workingman, a kind husband and father, and a benevolent citizen, he will indeed be greatly missed by the people of the valley he did so much to develop, and by the corporation whose interests he did so much to further. When he assumed the presidency of the D. & H. there was but a narrow-gauge railroad from Honesdale to Olyphant—now the company owns a regular-gauge steam railroad from Wilkes-Barre to Montreal, besides its old-time franchises, and is the possessor of hundreds of additional acres of coal lands.

Through his judgment and foresight the works of the Dickson Manufacturing Company have quadrupled in size and capacity, and afford employment to thousands of workingmen. His start in life was made in this city and his loss is keenly felt by his old friends and neighbors here, who have noted with pride his rapid advancement, and his career of almost unexampled prosperity. /SKETCH OF HIS LIFE. / Mr. Dickson was born in the year 1824, at Berwickshire, Scotland, and in the Summer of 1832 emigrated with his family to Canada. Here they remained two years, and then settled on a farm two miles east of Dundaff, in Susquehanna county. Two years later, the family located in Carbondale, where James Dickson, the father, entered the service of the Delaware and Hudson Canal Company as a machinist. Subsequently he occupied the position of Master Mechanic, which he held up to the time of his death, a few years since. / Thomas Dickson had attended school in Scotland, and subsequently in Canada, and in the winter of 1837, when he had quarreled with his schoolmaster at Carbondale, he offered his services to Geo. A. Whiting, who was then in charge of the horses and mules of the Canal Company. His services were accepted, and he was engaged in driving in and about the mines of the company during the summer of 1837. During the following winter he resumed his studies, his preceptor being the late Hon. S. S. Benedict, who was then teaching school in this city. He subsequently entered the store of Charles T. Pierson, in the spring of 1838. The following year, Mr. Pierson sold out his interest to other parties, and Mr. Dickson remained with the new firm, of which Joseph Benjamin was a member, until 1843, when he entered the service of F. P. Grow & Brother. In 1845, Mr. Dickson entered into partnership with Joseph Benjamin, and carried on business until 1852; then he bought the foundry of J. Benjamin & Co., now known as Van Bergen & Co. / Mr. Dickson came to Scranton in 1856, and, with a capital of \$30,000, established the Dickson Manufacturing Company, to which \$75,000 more was added before the enterprise was started. He remained as head of this enterprise until 1860, when his brother, Mr. G. L. Dickson, succeeded him. / It was after he had resigned from the Dickson Works that he entered the Canal Company as Superintendent of the Coal Department, and four years later he was made General Superintendent. In 1867 he was made a Vice-President of the company, and two years later he was chosen to the Presidency, which he retained to the time of his death. When he took charge of this corporation, its operations were confined north of Olyphant, and its entire tonnage did not exceed half a million. Under his faithful administration the increase has been regular and the extension continued, and the road has taken a leading place among the carriers from the anthracite region. / Mr. Dickson was also one of the original movers in the Moosic Powder Company, and was interested, directly and indirectly, in more of the great enterprises that have given Scranton its prestige and prosperity. / As a citizen, Mr. Dickson stood prominent as the embodiment of those qualities that ennoble and elevate manhood. Always liberal, he was never known to disregard that which embodied the least degree of merit, and as an exemplary Christian and supporter of his church—the Presbyterian—he stood in the front rank, commanding the respect of all who were associated with him. / As his administration of the affairs of the great

company over which he presided was marked by the highest integrity and utmost sagacity, so his private life was true and noble, and his intercourse with all who knew him characterized by an open-hearted sincerity which a knowledge of the world only deepened; and his honesty of heart and mind made his word a bond and his friendship a certificate of character. / THE REMAINS TAKEN TO SCRANTON. / Early on Sunday morning, Assistant Superintendent Bogart, of the Delaware, Lackawanna and Western Railroad, went to Morristown, N. J., with a special train, to convey the remains of the late Thomas Dickson to Scranton. The following gentlemen boarded the 9:30 New York train, and met the special train at the Delaware Water Gap, returning upon it to Scranton: Dr. S. C. Logan, Judge Alfred Hand, Dr. B. H. Throop, W. W. Scranton, J. J. Albright, James Blair, William Connell, John Jermyn, H. S. Pierce, E. W. Weston, J. E. Chittenden, W. R. Storrs, A. H. Vandling, and Sidney Broadbent, of Scranton; R. Manville, Andrew Watt and J. B. Van Bergen, of Carbondale, and John B. Smith, of Dunmore. / The train, which consisted of three cars, arrived in Scranton at 2:20 in the afternoon. It was drawn by the engine 'Thomas Dickson.' The forward car, which contained the remains of Mr. Dickson, was heavily draped. The second car contained the following mourners: Mrs. Peter Ballantine, of Newark; Mrs. E. Marvine, of Tarrytown; Mrs. J. R. Fordham, of Scranton; Mr. and Mrs. Andrew Watt, of Carbondale; Mr. and Mrs. Coe F. Young, of Honesdale [Coe F. Young was one of Thomas Dickson's confidential friends]; Mr. J. B. Dickson, of New York; and Mr. J. P. Dickson, of Scranton. Mr. C. H. Booth, formerly secretary of the deceased, was also a member of the party. The third car contained the gentlemen who left Scranton in the morning. The remains of Mr. Dickson were conveyed to his late residence on Washington avenue. A large procession of prominent Scranton gentlemen accompanied them thither. / THE FUNERAL. / A special train from Albany that arrived in Scranton Sunday evening, brought the following gentlemen interested in the railroads with which the late Thomas Dickson was connected: / Abraham R. Van Nest, Director D. & H. C. Co.; Horace G. Young, Assistant General Manager D. & H. C. Co.; Edwin Young, Counsel D. & H. C. Co.; C. D. Hammond, Superintendent Albany and Susquehanna Railroad; Theo. Vorhees, Superintendent Rensselaer and Saratoga Railroad; H. S. Marcy, General Freight Agent D. & H. C. Co.; D. Farlin, Assistant Freight Agent D. & H. C. Co.; L. W. Burdick, Assistant General Passenger Agent, D. & H. C. Co.; C. S. Pease, General Baggage Agent D. & H. C. Co.; R. C. Blackall, Sup't of Machinery D. & H. C. Co.; G. W. Church, General Coal Agent, D. & H. C. Co.; J. W. Sprong, D. & H. C. Co.; Samuel Huntington, D. & H. C. Co.; W. L. M. Phelps, J. H. Ramsey, J. W. Hutt, E. B. Burnhan, Albany; J. H. Gardner, Jr., Sharon Springs, M. Seelye, F. H. James. / The special train conveying Samuel Sloan, President of the Delaware, Lackawanna and Western Railroad, and party left New York at 8 o'clock Monday morning and arrived there at 12.20. It consisted of four heavily draped cars. The party, which was made up mainly of residents of New York and Morristown, numbered nearly 200 ladies and gentlemen. Among the prominent gentlemen were Messrs. R. M. Olyphant, W. H. Tillinghast, J. C. Hartt, D. N. Frisbie, Galusha A. Grow, F. G. Swan, Smith M. Weed, Dr.

Watts, Dr. Pierson, H. H. Olmstead, H. J. Jewett, G. de B. Keim, David Davis, D. Wilbur, A. Van Sanford, C. A. Walker, Daniel Wilson, R. A. Henry, D. M. Kendrick, B. G. Clarke, and A. Reasoner. They lunched at the D., L. & W. depot and were afterwards driven in carriages to Mr. Dickson's late residence. / The afternoon train from Wilkes-Barre brought the following gentlemen: Messrs. Charles Parrish, A. T. McClintock, J. C. Phelps, George A. Bedford, A. H. McClintock, W. B. Culver, J. H. Parrish and others. / The Dickson residence, which is situated on Washington avenue, near Mulberry, was thronged from 10 until 12 o'clock Monday with persons who desired to view the deceased. The employes of the Dickson Manufacturing Company's shops were among the number. / The funeral services occurred at 1:30 Monday afternoon. The house, the grounds and side of the street were crowded with people. The ceremonies were begun in the main hall by Rev. Dr. Logan, of the First Presbyterian Church, who called upon Rev. Mr. Beeber, of the Second Church, to lead in prayer. Mr. Beeber, in course of his touching and finely-worded invocation, thanked God for the endowments that had worked out for the deceased an illustrious and noble career. / A quartette composed of Mrs. Watres, Miss Emily Platt and Messrs. H. E. and W. J. Hand, then sang 'Beloved, it is Well.' / Dr. Logan read an epistle and then called upon Rev. Dr. Erdman, pastor of the South Street Presbyterian Church, Morristown, where Mr. Dickson worshipped. Mr. Erdman said that no persons bear a more exalted character than Mr. Dickson did. It was the speaker's privilege to be with him during his last moments. When his end drew near he put away everything worldly and rested on the Lord. There was no excitement, he put simple resignation in his Savior. It was a beautiful ending to a noble life. He lived as in the sight of God and therefore he could commend all things at last into the hands of his Redeemer. Integrity, honest, and faithfulness to duty marked the character of the deceased. Why he has been taken away, while in the full possession of his faculties, is alone known to God. Mr. Dickson was generous-hearted, full of good works, and carried himself with an unpretentiousness that recommended him to every one who met him. May God bless his family, said the speaker, and hold up this man's life to the young as an example. / Dr. Logan then spoke. If he were to follow the impulses of his own heart he would sit down in silence with his hearers. There is no more difficult task, he said, than to give a proper and true description of the character of Thomas Dickson. He seemed to be a brother to every man. He was a man of wonderful perception; the powers of his soul were so balanced that whatever position he was placed in he was ready to fill it. Dr. Logan traced his career from boyhood, and said that he identified himself with circumstances as if he were born to them. The doctor loved to think of him as a son of that old Presbyterian elder who delighted to bring up his family in strict accord with the commands of Divine law. In all the steps of his life the deceased carried with him whoever he was identified with. His workmen revered him. He never forgot a friend. He exhibited a constant desire for the cultivation of literature. He was a man who never changed. He was the same under all circumstances—always full of joy and humor. Thomas Dickson was a wonderful power in this community. Into his life was transformed the power of truth, justice and immortality. He was a sanctified Christian man and the influence of his life will go on. His

highest characteristic was in his home. He was sustained by a family that honored him. There was a church of God in his own house. He was sanctified by his charity, truthfulness and benevolence. We rejoice with this household that in his life there is so little to regret. / Dr. Logan then prayed for the comfort of the family, after which the quartette sang two stanzas of the hymn, 'Jesus, Lover of My Soul.' / This concluded the services. The remains which were enclosed in a magnificent casket, were conveyed to the hearse by Messrs. A. H. Vandling, J. E. Chittenden, E. W. Weston, C. D. Hammond, T. H. Voorhees and R. Manville, all of whom are connected with the Delaware and Hudson Canal Company. / The pall bearers were Messrs. H. J. Jewett, F. S. Winston, J. R. Thayer, W. H. Tillinghast, B. G. Clarke, Samuel Sloan, Co. L. G. B. Cannon, G. de B. Keim, David Dows and D. Wilbur. / The procession was a very large one. Interment was made in the family plot in the Dunmore Cemetery. / All the locomotives, passenger cars and depots on the D. & H. road and branches were draped in mourning, as well as the Dickson Works and many private offices and buildings. / A passenger train of five coaches was placed at the disposal of the friends in this city and Honesdale by Sup't Manville, and left here at 11.00 o'clock a. m., returning at half past 4 p.m., after the funeral, with the two directors' cars for Albany attached. / An autopsy was performed on Mr. Dickson's remains by Drs. Pierson, of Morristown, and Watts, of New York, and they found that all of the organs were in a normal condition except the heart, where there was much ossification of the left ventricle.—There was evidence that proved conclusively that, though at the time of his recent sickness Mr. Dickson was troubled with his kidneys, his death did not result from that cause. The physicians state the wonder is he lived as long as he did when the condition of his heart is taken into consideration." (*Carbondale Advance*, August 9, 1884, p. 3)

Thomas Dickson's obituary was published in the *New York Times* of August 1, 1884. In addition, an article titled "Death of Thomas Dickson" that was originally published in the *New York Herald* was reprinted in the August 7, 1884 issue (p. 3) of *The Kingston Journal and Weekly Freeman*, Thursday, August 7, 1884, p. 3.

"THOMAS DICKSON'S WILL. / HE BEQUEATHED FIFTY THOUSAND DOLLARS TO EACH OF HIS CHILDREN—AFTER A FEW OTHER BEQUESTS, HE LEAVES THE RESIDUE OF HIS PROPERTY TO HIS WIFE./ Register Tracy on Tuesday afternoon admitted to probate the will of the late Thomas Dickson. It is as follows: / I, Thomas Dickson, of the city of Scranton, in the County of Lackawanna, and State of Pennsylvania, being of sound mind, memory and understanding, do make and publish this my last will and testament, hereby revoking and making void all former wills by me at any time heretofore made. / First—I bequeath to each of my four children, namely, James P. Dickson, Joseph B. Dickson, Sophia R. Torrey, wife of Thomas F. Torrey and Elizabeth D. Boies, wife of Henry M. Boies, fifty thousand dollars. / Second—To his sister, Isabella L. Fordham, the sum of two thousand dollars. / Third—To his sister, Mary C. Watt, the interest and income on two thousand dollars during her natural life; at her decease, the said principal sum to go to Mary Fordham daughter of the said

Isabella Fordham./ Fourth—To Walter Dickson, son of his brother, George L. Dickson, two thousand dollars. / Fifth—To Roswell E. Marvine, during his life, the use of the house and lot in which he resides at Green Ridge. / Sixth—All the remainder of his personal and real estate he bequeaths to this wife, Mary A. Dickson, her heirs, executors, administrators and assigns forever. Provided however, that in case of her marriage, she shall receive from his residuary estate fifty thousand dollars, and the balance of the estate, after the payment to her of the said sum, shall be divided equally between his four children, and his wife shall share alike the share of either child, in case of his or her death to be paid to the heirs of such deceased child. / Lastly he nominates his wife, his cousin, James A. Linen, and his friend, Coe F. Young, his executors. He authorizes them to dispose of his property in any manner they shall see fit. / The witnesses were H. F. Atherton and Silas Leach. / The amount of Mr. Dickson's estate is as yet only a matter of surmise. His interests were large and varied, and he closely kept his own counsel as to his investments. It was stated by one of his relatives that the estate was about a million, though even the amount of his life insurance is not yet definitely known. Mr. Coe F. Young has gone to New York to open Mr. Dickson's vault in the safe deposit company and look over his securities and the schedule of his estate there filed. From this only can the exact figures be obtained. He is known to have carried two policies, amounting to about one hundred thousand dollars, and several others for lesser amounts are there deposited." (*Carbondale Advance*, August 9, 1884, p. 3)

Shown below is a photograph of "the spacious mansion of Mr. Dickson in Scranton" that is given facing p. 71 in *Logan*:



THE HOMESTEAD, SCRANTON, PA.

“To the Memory of Thomas Dickson. / At a meeting of the directors of the First National Bank, of Scranton, held August 4, it was deemed due to the memory of Thomas Dickson, who departed this life on the evening of July 31, 1884, to adopt and place upon record the following minute: / Thomas Dickson was one of the original corporators of this bank, and up to the time of his death one of its most honored and trusted directors. His conservative views and his wise foresight have in all our intercourse with him impressed upon us that he was ever a wise counsellor and executive officer. His deep interest in this institution his co-operation in all measures in its behalf will ever be a pleasant recollection to us. His constant success in all undertakings and his unbounding integrity have brought to us that hope and confidence which is the life and support of business. In times of financial depression his wisdom and courage never failed; in times of prosperity he was never carried beyond the line of prudence and safety. We feel deeply the loss of his presence in our counsels. The influence of a man of such strength as he possessed will long be felt in the business interests of this community. It is through such men that institutions are made stable. We bear to his afflicted family our deepest sympathy in their trial and direct that a copy of this minute signed by the President and attested by the Secretary be presented to them.” (*Carbondale Advance*, August 9, 1884, p. 3)

D&H Vice President Olyphant became President following Thomas Dickson's death:

“Vice President Olyphant, of the Delaware & Hudson Canal Co., has been chosen president of that company, in place of Mr. Dickson, deceased. Mr. Olyphant has been in the service of the company as vice president for some years past, and his promotion is a flattering testimonial of the ability with which he has discharged the duties of that office. Under his administration as president it may be expected that the affairs of the company will continue to be ably and prudently managed.” (*Carbondale Leader*, August 15, 1884, p. 2)

Here is a photograph taken by SRP on October 11, 2009 of the Dickson mausoleum in Dunmore Cemetery:



In the resolutions of sorrow and respect from the Board of Managers on the death of Thomas Dickson, we read: “. . . he adorned his Presidency by bringing to bear upon its duties the whole weight of a rare combination of mental and moral endowments. With all the cordiality and loyalty of his nature, he carried out the broad policy of development which had marked the administration of his predecessor in the office, and with which he had always been in generous sympathy. / To insure the success of his noble work he was furnished with an intellectual strength, a faculty of rapid and accurate judgment, a power to grasp and arrange multifarious

details, and an intuitive knowledge of men which, together with his immense power of will, communicated a unity and a momentum to his endeavors that compelled universal respect. In the discharge of his official duties he showed a calm reserve and a clearly defined high purpose of well doing, which betokened the real greatness of his character, while in his personal relations, as their chief, with his fellow servants of the company of every grade, he won their admiration by the quiet amenity and the noble consistency of his life."

August 5, 1884: Robert M. Olyphant, a D&H Manager and Vice President since May 9, 1882, was appointed acting President. On October 24, 1884 he was elected president (served until 1903). Also on October 24, 1884, Coe F. Young, who had served as general manager, was elected Vice President and general manager.

Hollister, on Thomas Dickson:

"None of our representative coal men have been so fortunate in their aspirations as Thomas Dickson. He rose from the ranks of the people by no other reason than that of his own inspiration. A man of talent and character, prudent in speech, excellent in judgment, considered in the opinions of others yet inflexible in the correctness of his own, when it was fully made up, looking to his own efforts for the success and regard belonging to them, averse to politics, indifferently educated in early life and yet possessing varied literary and social attainments, estimating time too highly to permit an hour to go by in idleness, he rigidly practiced the industry himself which he desired others to imitate for he considered that no man unwilling to assist himself deserved aid from others. He has given his whole heart to the interests of the Company in all its progressive developments as if they had been his own and thus has become the moving spirit in its modern progress and history. / Mr. Dickson has assurance of long life in his physical organization and he is now fifty-six years of age. Ardent in hopes that have been honorably realized yet never charged with duplicity or deceit, he has filled the humblest and the highest places within the province, of the Delaware and Hudson Canal Company with the same conception of its true welfare, occupying every intermediate position from a driver boy to the presidency of this great Company, which, by its immense capital of twenty millions and its ramifications of nearly one thousand miles of railway, underground and overground, has become established as a commonwealth of itself. The advancement of Thomas Dickson as a railroad magnate, may be attributed to two simple facts, first he never abandoned what he had considerably undertaken without accomplishing it; second, he dealt with all men in good faith and fairness and never broke his word. He said what he meant and meant what he said as thousands of employees of the Delaware and Hudson Canal Company and others can attest. / At the grand opening of that great Branch of the Delaware & Hudson Canal Company's road—the New York & Canada Railway Nov. 1875, President Dickson gave the following summary of the growth of the Company. / 'To convey to you an adequate impression of the growth of the Company, I may say that in 1830, the total product was 43,000 tons, and in 1860, the year of my entering the service of the Company the product had reached 541,000 tons; the present year it will be three millions; in 1860 the Company had a productive capacity of not to exceed 600,000

tons per annum, had a 108 miles of canal, and 23 miles of railroad; its productive capacity is now four millions of tons per annum, and in addition to the canal it owns and operates 700 miles of railway, besides some 200 miles of underground railway in their mines; and while the capital stock has been increased from time to time, until now it reaches twenty millions, the increase of product and of the business has been much larger in proportion.' " (pp. 157-58)

James Pringle Dickson and Harry Dickson:

A biographical portrait of James Pringle Dickson, the oldest son of Thomas and Augusta (Marvine) Dickson, is given in Volume II of Thomas Murphy's 1928 *History of Lackawanna County* on pp. 1212-1213. James Pringle Dickson was born on July 24, 1852 and died in 1906 (buried in Dunmore Cemetery). In June, 1883, he was elected president of the Dickson Manufacturing Company, having succeeded his father. He married Laura H. Reynolds, the daughter of J. Fuller and Elizabeth (Hancock) Reynolds. Three daughters were born to them: Mary Augusta, Elizabeth, and Janet.

Thomas Dickson's youngest son, Harry, died before his father:

"Harry Dickson, the youngest son of Thos. Dickson, Esq., died at the Hoffman House, New York, on Wednesday. He was an interesting child, 11 years old. His disease was diphtheria. Mr. and Mrs. Dickson have the sympathies of this entire community in their sad bereavement." (*Carbondale Advance*, January 9, 1875, p. 3)

"About one hundred people from this city attended the funeral of Harry Dickson last Sunday. The services were held at the spacious mansion of Mr. Dickson in Scranton [see photograph on page 110]. A special train left here at 1:15 P.M. and returned between four and five o'clock." (*Carbondale Leader*, January 16, 1875, p. 3)

Edward W. Weston named Superintendent of D&H Mining Operations in 1864:

An important member of the Thomas Dickson team was Edward W. Weston, who was named superintendent of the D&H's mining operations in 1864. The following biographical portrait of the man is given in PABRLCP (951-52).

"Edward W. Weston born in Salem, Wayne County, Pa., December 5, 1823. . . . his mother was a daughter of Jason Torrey, conspicuously connected with early enterprises of Wayne County. Until 1844 he remained in Salem, availing himself as far as he could of the advantages of the country schools, and devoting the remainder of his time to work on the farm, land surveying and teaching. Next he entered the land office of his uncle, the late John Torrey of Honesdale, to assist

in engineering and surveying, and remained there until 1859, when he was placed in charge of the lands and surveys of the Delaware & Hudson Canal Company and was stationed at Carbondale. In 1860 he removed to Scranton and assumed control of the opening of mines and construction of breakers for the company. / In 1864, upon the appointment of Thomas Dickson to the general superintendency of the company, Mr. Weston was made superintendent of the company's mining operations. In consequence of the large increase in the business of the concern, owing to the expansion of the coal trade and acquisition of extensive railroad properties, it became necessary to separate real estate and mining operations, and in April, 1874, he was appointed general agent of the former, assuming entire charge of all matters pertaining to the real estate and property of the corporation. This position he retained until February 1, 1889, when failing health compelled him to withdraw from active management of the department, although still retained by the company as counselor until the time of his death. / . . . His death occurred October 28, 1891, after a protracted illness. . . A man of great force of character, he amassed a fortune by diligence and faithfulness in business and at his death left a valuable estate." Among other positions held, he was president of the Northern Coal & Iron Company and the Weston Mill Company; president of the Hudson River Ore & Iron Co., vice-president and a director of the Dickson Manufacturing Company; and director of the Moosic Powder Company." *PABRLC*, pp. 951-52:

Edward W. Weston's son, Charles, was also an important D&H official:

Charles S. Weston (born in Carbondale, August 25, 1860), the only son of Edward W. and Susan (Moore) Weston, like his late father, was an important official in the D&H. "In 1878 he entered the Rensselaer Polytechnic Institute at Troy, N. Y., from which he graduated four years later, with the degree of C. E. / Fortified with a thorough theoretical knowledge of his profession, Mr. Weston accepted a position as civil engineer with the Delaware & Hudson Canal Company, in which capacity he remained for several years. In October, 1885, he was appointed assistant general agent of the real estate department, under his father, and his service in this position was so satisfactory that, when failing health forced his father to resign, he was promoted to be general agent, February 1, 1889. To his supervision was given the company's real estate over the whole line, including mining properties and canals and the fact that he filled the position efficiently is shown by his continuous retention therein. / As successor to his father, Mr. Weston became president of the Northern Coal & Iron Company, owners of all the coal mines and breakers operated by the Delaware & Hudson Canal Company south of Scranton, and owners of the railroad from Scranton to Wilkesbarre. His connection with other enterprises include the following: vice-president and director of the Dickson Manufacturing Company; vice-president and director in the Weston Mill Company; director in the Moosic Powder Company. . . His home, in Wyoming Avenue, is presided over by his wife, formerly Grace Storrs, daughter of W. R. Storrs, general coal agent of the Delaware, Lackawanna & Western Railroad." (*Portrait and Biographical Record of Lackawanna County Pennsylvania*, p. 952)

In 1880, the Delaware and Hudson Canal Company was presided over by Thomas Dickson. Let's have a brief look at the company at that time.

The D&H Canal in 1880:

107 locks, including double lock at Honesdale; 2 weigh locks, 2 stop locks, 2 guard locks, 22 aqueducts (4 wire suspension and 18 wood trunk); 110 waste weirs; 2 dry docks (leased, not operated by D&H), plus numerous privately owned dry docks; 14 canal feeders; 16 feeder dams; 136 highway and farm bridges; 37 towing path bridges (one 5-span wrought iron bridge crossing Lackawaxen at Honesdale), 26 crossing aqueducts, 10 crossing feeders; 22 reservoirs; boats built by D&H: 915 canal boats, 66 transfer boats, 3 freight line boats, 16 barges, 2 wrecking boats, 1 propeller boat, and 1 dredging machine (there was also an uncounted number of privately built boats on the canal).

1880 D&H Annual Report

In a great many respects, this annual report is a wonderful portrait of Thomas Dickson himself: capable of seeing and understanding the big picture, thoughtful, honest, straightforward, forceful, diplomatic, visionary, polite.

“Delaware & Hudson C. Co. / The following statement of the earnings of this company for the past year has been given to the public: /

Receipts from coal.....	\$7,402,543.29
Receipts from railroads.....	4,673,435.90
Interest and miscellaneous.....	448,569.89
Total.....	\$12,524,549.18
Less expenses of all kinds.....	7,913,507.04
Gross profits.....	4,611,042.14
Taxes, interest and rentals.....	3,259,619.93
Net earnings.....	\$1,351,422.21

This is 6 $\frac{3}{4}$ per cent. on the capital, as against a deficit of \$650,643.28 in 1879. / Del. & Hud. stock is now quoted t 112, and with good reason.” (*Carbondale Advance*, February 19, 1881, p. 3)

D&H Annual meeting took place on February 22, 1881.

“Annual Report of the Board of Managers / DELAWARE & HUDSON CANAL CO. / Through the courtesy of President Dickson, advance sheets of the forthcoming ‘Annual Report of the Board of Mangers of the Delaware & Hudson Canal Co.,’ are upon our table. It is a gratifying exhibit, showing that this old and honorable company has again attained to a state of

prosperity, so that the earnings of the company again exceed its expenditures, and give the sure promise, if business continues good, of being able to pay fair dividends upon the stock of the company. The interests and prosperity of the company are so thoroughly interwoven and blended with those of our town, that we copy President Dickson's statement below: / NEW YORK, Feb. 22.—The following statement of the business of the Delaware and Hudson Canal Company for the year ending December 31st, 1880, was submitted at the annual meeting to-day: / The business of the company for the year ending December 31st, 1880, is herewith respectfully submitted:

Coal mined and sold for account of the Company.....	2,674,704.18 tons
Transported for other parties.....	372,889.10 tons
Total.....	3,047,594.08 tons

Which was distributed as follows:

From Honesdale, via canals and railroads.....	1,531,951.00 tons
South from mines.....	59,398.16 tons
Erie and West.....	480,576.07 tons
North, via A&S. R. R.....	402,785.02 tons
Local sales, etc.....	199,993.13 tons
Total.....	2,674,704.18 tons
Add transported for other parties.....	372,889.10 tons
Total.....	3,047,594.08 tons

The result of the business for the year showing a profit of \$1,351,422.71, or fraction over 6 $\frac{3}{4}$ per cent. on the capital stock, may be regarded as satisfactory, especially when it is considered that in the early part of the year the price of coal was not remunerative, and only became so after the general adoption in March, of the 'restrictive policy' in production. After this, the buyers of coal, accustomed to the low prices caused by years of unhealthy competition, and lacking faith in the continuance of harmonious action on the part of the producers, took coal only as necessity compelled them. / As a consequence of such action the mines, for the greater part of the year, were worked on half time; the old accumulations of coal were exhausted, and the year closed on bare markets. / In addition to the above, the business of the company was seriously affected by a continued drouth [sic], which compelled a long suspension of business on the canal, and reduced our transportation to an extent of not less than 250,000 tons of business, and the profits thereon. / It is gratifying to be able to state that 'the leased lines' have become self-supporting, and that their collateral advantages, as avenues for the distribution of our coal, are annually increasing. It is now safe to assert that the possession of these lines has strengthened the position of the company to an extent that fully justifies the policy that led to their acquisition. / The disastrous results which followed the plan called 'open competition' (but which really means wanton waste and destruction) led to the adoption of the 'restrictive policy' that was foreshadowed in our

report of 1879. The producers of coal no longer differ upon the question of ‘over production.’ All agree that it leads to general demoralization of the trade and ruinously low prices, and the experience of the last year can only strengthen such conviction. / It may therefore be assumed that the policy of judicious restriction will be continued; that prices of coal will be made fair alike to the consumer and the producer, and that the managers of this great interest will so conduct it, that while the interests of the public will be protected on the one hand, the owners of the properties on the other, may feel assured of reasonable returns upon their investments. / The managers are aware that the long suspension of dividends has caused great hardship in many instances, and that those who have loyally retained their stock through the long period of depression would have been gratified by a dividend from the profits now reported. This course however did not consist with their convictions of duty. It must be remembered that the disastrous condition of the coal interests for the later months of 1876 to the close of 1879 left the capital of the company impaired. Until such impairment was made good, it would have been impolitic, if not illegal, to divide moneys even though the earnings of the company *seemed* to justify such a course. / To know that such a deficiency is now fully made up, and that the property of the company is in the best condition in every department, must be alike gratifying to stockholders and managers, and enables the latter to state that a resumption of dividends can now be justified with reasonable grounds for a belief in their regular continuance. / To correct a general, but unfounded belief, that the debt of the company has been increased over \$5,000,000, since the suspension of dividends, your managers take this opportunity to state that the \$5,000,000 loan (known as bonds of 1917) was made for the purpose of retiring the floating debt and other maturing obligations of the company. / THOMAS DICKSON, President.” (*Carbondale Advance*, February 26, 1881, p. 3)

Comments from the *Carbondale Leader* on President Dickson’s 1880 Annual Report:

“PRESIDENT DICKSON’S REPORT. / We have been favored with advance sheets of the ‘Report of the Board of Managers of the D. & H. C. Co.,’ which we are happy to lay before our readers [the report is in the issue of January 26, 1881, p.3]. The satisfactory condition of the affairs of the corporation were foreshadowed in a statement of the prosperity of the leased lines which we published some weeks ago, and in the ‘good showing’ of the general business of 1880 which the LEADER presented in tabular form last week. It seems proper for us to repeat what we have at other times indicated in these columns that this happy condition of affairs is in a large measure due to the ‘restrictive policy’ which Mr. Dickson has so strenuously advocated in years past; and it may be further stated that the idea of the ‘leased lines’ extension through New York and into the Dominion of Canada, which originated with Mr. Dickson and which has been the occasion of so much animadversion, is now shown to have been one of remarkable business foresight. ‘There is nothing so successful as success,’ and he may now be congratulated on

laying the foundations of an abundant future prosperity for the Company. After all the depression in its affairs which the last few years have witnessed, it must be a proud day for him to see a restored prosperity—the stock nearly up to the old figure, and dividends about to be resumed.” (*Carbondale Leader*, January 26, 1881, p. 2)

Hollister's perspective on the D&H in 1880 in his unpublished manuscript:

"Very considerable and costly changes will need to be made in our road between Carbondale and Scranton, to provide for the increase tonnage to be passed over it, when the western and northern connections already mentioned shall have been completed. / It will probably be found that the most effectual and in the end the most economical mode of accomplishing this objective will be to do away with our present gravity system between Carbondale and Olyphant, and to build in place of it a double track locomotive road, adding a second track to the road already constructed from Olyphant to Scranton. / A large addition to the capacity of our road between Carbondale and Honesdale is also much needed. With our present facilities, our maximum tonnage which we are likely to reach during the present season will not exceed two millions of tons, while to fill our canal, to supply the coal to be carried eastward over the Erie Road, and to meet engagements into which we have entered with other parties for the transportation of coal we should be in a position to move with ease over this portion of our road not less than three millions of tons annually. / The improvements in our line of road thus indicated can hardly be affected for a smaller sum than \$1,500,000 making a total of nearly \$3,500,000 required for works already in progress, or which must soon be commenced, unless we are prepared to yield to bolder rivals the large and profitable markets now open to our enterprise." (p. 177)

We will now focus on the revisions to the roadbed in 1868 that were necessary to market effectively the vast quantity of coal that the D&H could now ship to market.

The Major Revisions for the 1868 Configuration

1. Loaded track same as in 1859 (except Plane No. 12 was added and Planes 9-12 were now single-tracked to accommodate the three new uphill empty-car planes (Nos. 18-20) that ran along side them; also “Between 1866 and 1869 planes Four to Eight were made single track for upgrade movement only.” W. E Anderson. Planes Nos. 1-3 remained double-tracked. The loaded track was now, as in 1859, 15.55 miles long.

2. Light track extended from Waymart to Farview (three uphill planes, Nos. 18-19-20, put on same terrain as downhill planes (a fourth downhill plane was added in 1868) from Farview to Waymart); Level 20 (Farview to Archbald) installed. The light track work was begun by O. D. Shepherd and completed by R. Manville. This new light track was opened for the movement of light cars on April 21, 1868. Also, alteration of Plane No. 13 at Honesdale (says *COP*, p. 200) although we have not yet been able to learn what alterations to that plane were made circa 1868. We do know that a substantial revision to Plane No. 13 was made in 1859, and have documented that revision in the volume in this series on the 1859 configuration.)

3. Enlargement of storage facilities at Honesdale

Surveying for the 1868 Revisions

Rumors of Revisions:

“RUMORS.—There are rumors of important sales of Coal Lands about us—new railroads, new developments, and great enterprises about to be entered upon. It is at least *certain* that Engineers are upon the mountain east of us seeking to find a feasible and practicable route for a new railroad.” (*Carbondale Advance*, Saturday, December 16, 1865, p. 2) The Engineers on the mountain were surely looking for the best route for the light track from Farview into Carbondale, which would be constructed 1866-1868; the coal lands to be purchased were probably ones located down the valley.

One of the engineers who was upon the mountain east of Carbondale, seeking to find a feasible and practicable route for a new railroad, the new light track, was James P. Dickson, the son of Thomas and Mary Augusta (Marvine) Dickson, who was born in Carbondale on July 24, 1852. In the biographical portrait of the man in *Portrait and Biographical Record of Lackawanna County, Pennsylvania*, pp. 503-504, we read:

"The active business experience of Mr. Dickson began with his appointment as a member of an engineer corps that surveyed preparatory to the construction of railroad lines by the Delaware & Hudson Canal Company, a work that not only proved beneficial to his health, but was also very congenial to his tastes."

From 1872 to 1896, James P. Dickson worked in various capacities for the Dickson Manufacturing Company. In the same portrait we read: "A year after his return home [from China, where he was connected with the commission house of Olyphant & Co.] in 1872, he entered the office of the Dickson Manufacturing Company, of which his father was president. Occupying the position of a clerk for three years in that way he gained a thorough knowledge of the details of the business and was fitted to later assume its leadership. In 1875 he was appointed agent of the company at Wilkesbarre and there the seven following years were spent. . . After a short period of service as vice-president, in June, 1883, he was elected president of the company. . . / The Dickson Manufacturing Company was organized in 1856 with a capital stock of \$150,000, and the first plant consisted of a foundry, machine shop and blacksmith's shop. At the inception of the enterprise employment was furnished to thirty men or more. To-day the capital stock is \$800,000 and on the pay roll are the names of more than one thousand men. . . / Resigning from the presidency in 1896, Mr. Dickson retired to his country seat at Dalton. . ."

R. Manville and O. D. Shepherd

The 1868 configuration was created under the direction of O. D. Shepherd and R. Manville, with Manville completing the work begun by O. D. Shepherd on the west side of the Moosic Mountain.

Before we look at the 1868 configuration of the Gravity Railroad that was made a reality by Rollin Manville (1824-1891) and O. D. Shepherd, we shall take look at the lives of these two important figures.

Manville Excursus

January 1856: Rollin Manville entered the service of the Delaware & Hudson Canal Company as assistant superintendent, taking the entire charge of the Gravity Railroad from Waymart to Honesdale, including the coal pockets and canal docks and the whole plant pertaining to the shipment of coal by boat.

April 1857: When the work of constructing the 1868 configuration was begun, in April 1857, R. Manville was placed in charge as construction engineer.

1864: R. Manville promoted to the position of superintendent of the road, a position he held until his death in 1891.

In the obituary of the man that was published in the *Carbondale Leader* (June 25, 18991, p. 4), there is the following paragraph, which summarizes what Rollin Manville accomplished for the D&H:

"What He Accomplished. / Under Mr. Manville's administration the valley road was constructed, the Union coal company's line purchased; the arrangement under which the freight and passenger trains of the Delaware & Hudson are whisked over the Erie's branch; the Albany and Susquehanna, and Renneselear [sic] & Saratoga acquired, the connecting link between Lanesboro and Nineveh built; the Canada outlet constructed; the extension of the valley road to Wilkes-Barre completed and the Farview switchback [Shepherd's Crook], which has made the railroad famous the country over, are among the evidences of what was accomplished during the five and thirty years that he served as railroad superintendent of this great coal and railroad corporation. Such a record of a busy life few men even in this age of phenomenal progress, are privileged to leave behind when called to leave the sphere in which their lives have been spent."

Here is the complete obituary of the man that was published in the *Carbondale Leader*, June 25, 1891, p. 4:

“SUPT. MANVILLE DEAD. / He Passed Away at 6:40 O’Clock Last Evening—The History of an Active Live. / Just as the brilliant orb of day touched the western horizon, bathing the earth in splendor and lighting up the clear blue sky with fitful flashes that betoken the parting day, the soul of Rollin Manville peacefully took its flight from earth to that land where time is not measured by the rising and setting of the sun. At 6:45 last evening the end came and the earthly career of one whose active life had kept him in close contact with a busy world terminated, not suddenly, leaving incomplete the life task undertaken, but rather as one who at the close of day lays aside the implements of labor and enters upon the well earned rest. Sad always are life’s closing scenes but the gloom which hides the border land from mortal sight is brightened by the consciousness which possessed those who watched the fluttering breath, that the life ebbing slowly away, was in all its vigor for many years earnestly devoted to making the world better for the important part which he had taken in its affairs. It is this knowledge that fills the human heart with hope and enables those who mourn most keenly to bear the sorrow which this bereaved family are called upon to suffer. In their sorrow this family of the deceased have the earnest sympathy of this entire community and the tears of all classes will mingle to-day with those of his loved ones, for there is real sorrow among the people, for they realize that a warm, true friend of the people has passed to his final reward. / **His Active Life.** / Mr. Manville was born at Whitehall, Washington county, N. Y., November 6th, 1824. He entered the railroad service as rodman with the surveying party in charge of the construction of the Saratoga & Washington R. R. in July, 1847, and continued in the service of the same road until October, 1849, when he was appointed Division Engineer of the New York & Harlem R. R. His first work in Pennsylvania began when he was employed to survey and make plans for a railroad from Wilkes-Barre to the Delaware River at Water Gap. The survey was made during the summer of 1853, but the project was abandoned after the plans had been prepared. In September of the same year Mr. Manville returned to New York and was appointed constructing engineer of the Flushing and Hunter’s Point Railroad. The road was completed in June, 1855, and in January, 1856, Mr. Manville entered the service of the Delaware & Hudson canal company as assistant superintendent, taking entire charge of the gravity railroad from Waymart to Honesdale, the coal pockets, and the canal docks, and the entire plant pertaining to the trans-shipment of coal by boat. During that year the system of transferring coal from cars to boats was subjected to many changes and the cost of trans-shipment was materially lessened not only, but the loading of canal boats under the new methods was made comparatively easy. The improvements made under the direction of Supt. Manville at Honesdale were in line with the changes contemplated in the entire gravity railroad system, and when the work of constructing the present gravity railroad was commenced in April, 1857, Mr. Manville was placed in charge as constructing engineer. Nowhere in the world has the skillful engineer accomplished so economically such a feat in

railroad building as the system of inclines over which millions of tons of anthracite have been transported out of the valley of the Lackawanna over the Moosic range into the valley formed by tributaries of the Delaware. / The problem which puzzled the coal producers in the anthracite region was how are we to secure transportation to the seaboard and the markets east and west for the produce of our mines. This was one of the important questions that Mr. Manville was called upon to grapple with and to his practical foresight is largely due the fact that the Delaware & Hudson Canal Co., own and control the leading outlets from the northeastern coal fields of Pennsylvania and possess shipping facilities that are not surpassed by any carrying corporation in the United States. / **What He Accomplished.** / Under Mr. Manville's administration the valley road was constructed, the Union coal company's line purchased; the arrangement under which the freight and passenger trains of the Delaware & Hudson are whisked over the Erie's branch; the Albany and Susquehanna, and Renneselear [sic] & Saratoga acquired, the connecting link between Lanesboro and Nineveh built; the Canada outlet constructed; the extension of the valley road to Wilkes-Barre completed and the Farview switchback, which has made the railroad famous the country over [emphasis added], are among the evidences of what was accomplished during the five and thirty years that he served as railroad superintendent of this great coal and railroad corporation. Such a record of a busy life few men even in this age of phenomenal progress, are privileged to leave behind when called to leave the sphere in which their lives have been spent. / But this alone does not complete the story of this active life, for with all the time and labor devoted to the interests of the company which he so faithfully and ably served, Mr. Manville found the time to look after the interests of the men whose services in the various departments of the railroad system he considered quite as essential to the success of the corporation as the responsible places held by the managers. In all his relations with the men he was uniformly courteous and in his decisions he was known to be uniformly fair. He had grown up with the great corporation and was not only familiar with the duties of the humblest employe, but he retained for the workman the kindly feeling engendered by the spirit that men in whatever situation in life are of one family and entitled to all the privileges that free and equal birth secures. / Few men enjoyed the confidence of so many wage earners as did Supt. Manville, and in the multiplicity of changes he was never known to pass an acquaintance without a kindly greeting or nod of encouragement. His great heart was readily touched by the appeal of the needy and his hand was never withheld when the claim of the helpless was presented to him. In all matters pertaining to the home life he was a staunch advocate of home protection. As a citizen he was always ready to further every movement looking to the improvement of the home town and in these days of contemplated progress the enterprising element in this city will sadly miss the encouraging words and practical aid he was always so ready to extend them. / When the movement came to erect a hospital for the care of the injured miners and railroad men was projected Mr. Manville was among the first to give it his hearty support and as the President of the Board of Trustees he did much to set the organization right before the people of the district. In this as well as all matters pertaining to the growth and prosperity of this city the death of Supt.

Manville will be keenly felt. / His residence in this city dates from January, 1864. A quarter of a century well rounded out he has been one of the people of the Anthracite city. / **The Funeral Services.** / This afternoon the remains will be brought from the cottage at Farview to the family residence in this city. To-morrow morning at eight o'clock the body will be taken to Trinity Church where those who wish to look upon the face of the dead man for the last time may do so, between the hours of 8 o'clock a. m. and 4 o'clock p. m. At five o'clock religious services will take place, and on Saturday morning at 6:20 o'clock the remains will be conveyed by special train to Troy, N. Y., where in accordance with the last wishes of the deceased and the desire of the family the body will be incinerated." (*Carbondale Leader*, June 25, 1891, p. 4).

Here is the biographical portrait of the man that was published in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897, pp. 120-22):

"ROLLIN MANVILLE. The death of a good man is always a deep sorrow. A man who has been a leader in his community, who possesses all the qualities of noble manhood and who has labored through the years of his active life for the welfare of his fellowmen and the prosperity of his town, may well be accounted a citizen whose death is a public loss. The life of Rollin Manville, who passed away June 24, 1891, forcibly illustrates the truth of this principle. He was a man whose every impulse was honest, whose conscience was his guide, who met all the responsibilities of life with courage, whose mind was clear and comprehensive, and who had a wealth of culture that gave him intimate communion with the best thought of the world. His ability was recognized by the Delaware & Hudson Company, whom he represented for many years as superintendent of the Pennsylvania Division. / Born in Whitehall, N. Y., November 6, 1824, the son of Amos Manville, the subject of this article in early life chose the occupation of a civil engineer, and in July of 1847 entered the railroad service as rodman on the construction of the Saratoga & Washington Railroad. Two years later he was appointed division engineer of the New York & Harlem Railroad. His first work in Pennsylvania began in 1853 when he was employed to survey and make plans for a railroad from Wilkesbarre to the Delaware River at Water Gap. The survey was made during the summer, but after the plans were prepared the project was abandoned. In September of the same year he returned to New York and was appointed construction engineer of the Flushing & Hunter's Point Railroad, which was completed in June, 1855. In January of the following year he entered the service of the Delaware & Hudson Canal Company as assistant superintendent, taking the entire charge of the Gravity Railroad from Waymart to Honesdale, including the coal pockets and canal docks and the whole plant pertaining to the shipment of coal by boat. / During 1856, under the direction of Mr. Manville, the system of transferring coal from cars to boats was subjected to many changes and the cost of shipment was materially lessened under his new method, while the landing of canal boats was also made comparatively easy. The improvements under his direction at Honesdale were in line with the changes contemplated in the entire Gravity system, and when the work of constructing

the present system was commenced in April, 1857, he was placed in charge as construction engineer. Nowhere in the world has the skillful engineer accomplished so economically such a feat in railroad building as the system of inclines constructed by Mr. Manville, by which millions of tons of anthracite coal have been transported from the Lackawanna Valley over the Moosic range into the valleys formed of the tributaries of the Delaware Valley. Under his administration the valley road was constructed and the Union Coal Company's lines purchased. / With all the time and labor devoted to the interest of the company, which he so faithfully and ably served, Mr. Manville found time to look after the interest of the army of men, whose service in the various departments of the railroad he considered quite as essential to the success of the corporation as the responsible places held by the managers. In all his relations with the men, he was uniformly courteous and his decisions were fair. Having grown up with the great corporation, he was not only familiar with the duties of the humblest employe, but he retained for the working men the kind feeling engendered by the belief that men, in whatever station of life, are of one family and entitled to all the privileges that free and equal birth secure. Few men enjoyed the confidence of so many wage earners as did he. With all the responsibilities resting upon him, he was never known to pass one of his men without a kind greeting. His great heart was readily touched by the appeal of the needy and his hand was never withheld when the claim of the helpless was presented to him. It was largely due to his liberal views and that of the corporation he represented, that the working men of Carbondale own such comfortable homes, for every man is sure of a life position if he attends to the duties of his place. / A stanch advocate of home protection, Mr. Manville looked carefully to the improvements of his home town and took great interest in the building up of Carbondale. Every worthy enterprise received his support. He was the leading factor in the organization of the free hospital for the care of injured miners and railroad men, and did much to put it on a solid foundation, serving as president of the board of trustees from the time of organization until his death. He was also president of the Carbondale Gas Company, the Crystal Lake Water Company, and interested in many other local enterprises. His home was in Carbondale from 1864, when he was promoted to the position of superintendent of the road, until his death. In religious belief he was a member of the Trinity Episcopal Church and a leading worker in its behalf, being warden and vestryman for more than twenty-five years. His wife, two sons, C. Rollin and Willis A., and a daughter, Florence (Mrs. David Zieley, Jr.) survive him. / C. Rollin Manville was born in Honesdale, Pa., January 13, 1858, graduated as a civil engineer from Rensselaer Polytechnic Institute of Troy, N. Y., June 16, 1880, and in the same year entered the service of the Delaware & Hudson Railroad as assistant engineer of the Pennsylvania Division, filling that position until March, 1883. From that time until November, 1885, he served as engineer of the same road, and afterward, until July, 1891, was assistant superintendent. On the death of his father, he was promoted to the position of superintendent, which responsible position his experience and ability qualify him to fill. His brother, W. A., is also connected with the road as its representative at Wilkesbarre, Pa." (*Portrait and Biographical Record of Lackawanna County, Pennsylvania*, 1897, pp. 120-22)

Rollin Manville's body lay in Trinity Church for viewing by the public. Here is the article that was written by a reporter for the *Leader* as the body lay in Trinity Church for public viewing:

"HUNDREDS VIEW HIS FACE. / Mr. Manvilles [sic] Remains at Trinity Church—Resolutions Passed. / The body of Superintendent Manville was brought to this city by special train from the Farview residence yesterday afternoon, and was met at the Seventh avenue station by the heads of the departments of the Delaware & Hudson Company, and many prominent citizens, who escorted the remains to the family residence on North Main Street. Many intimate friends and relatives from this city and elsewhere called at the house during the latter part of the day to offer their condolence to the family and their assistance in any way that they could be made useful. / This morning at eight o'clock the remains were taken to Trinity church where the face was exposed to view and hundreds have filed past the bier during to-day. The face of the dead man is remarkably free from the effects that would be expected as the result of his suffering, and he seems to be in a peaceful, refreshing sleep. There were many wet eyes among those that gazed on the features that were familiar on the streets so short a time ago, and the emotion was not confined to any class. / Around the casket a profusion of flowers were sent by friends, some of them worked into beautiful emblems, and many potted plants sent as a tribute by those who knew Mr. Manville. The family pew in the church is draped and a few lilies occupy the space that was so often filled by the dead superintendent. / The offices of the Delaware & Hudson Company are draped in mourning and the gravity and locomotive shops are closed. The Hendrick Manufacturing Co's works stopped work at noon, and nearly every place on the business streets will close between the hours of four and six o'clock. / After the funeral services this afternoon the body will remain in the church until to-morrow morning when it will be removed at 6:45 to the Seventh avenue station and taken thence by special train to Troy for Cremation. / The pall bearers are Messrs. L. A. McMullen, E. M. Peck, Mayor Rettew, George Burrell, Thomas Orchard, Andrew Wylie [Wyllie], Pierce Butler and William Bowers. / **HOSPITAL TRUSTEES' RESOLUTIONS.** / At a special meeting of the Board of Trustees of the Hospital Association held last evening in the city council chamber, vice president John B. Davis presiding, the members took occasion to voice their sorrow at the death of the President R. Manville. On motion by J. B. Van Bergen, Messrs. M. F. Norton, Julius Moses and S. S. Jones were appointed a committee to prepare a memorial expressing the profound sorrow of the members of the Hospital Association on this occasion. The committee submitted the following which was approved and the secretary was directed to make the memorial a part of the records of the meeting and have the same published: / The death of Rollin Manville, president of this Board of Directors, of the Carbondale Hospital Association fills the hearts of his associates with sadness. In the meetings of this organization his presence has served to encourage and his words of counsel made the difficult task undertaken comparatively easy work. To this undertaking he brought his experience and an earnest desire to provide an asylum for the homeless injured; two

forces that never fail to secure success. / To this association the death of Mr. Manville is a severe blow, but the surviving members bow in humble submission to the edict which deprived them of a wise and deliberate presiding officer, a thorough going business manager, and an ever cheerful and companionable associate. / Bowing reverently to the will of Him who doeth all things well, we tender to the bereaved family of our departed president the earnest sympathy of men bound by ties fraternal to cherish the memory of him who death they mourn to-day. / On behalf of the Board / M. F. Norton, Julius Moses, / Saml. S. Jones. / Com. / CRYSTAL LAKE WATER CO. RESOLUTIONS. / At a special meeting of the Directors of the Crystal Lake Water Company held at their office on Friday morning, June 26, to take action upon the death of Rollin Manville, President of the Company, and to give an expression of their sorrow and loss, the following preamble and resolutions were unanimously adopted: / WHERAS, It hath pleased our Heavenly Father in His infinite wisdom to remove from among us our esteemed friend and associate Rollin Manville, and / WHEREAS, He has been associated with us in intimate business relations since the organization of this company and for the past twenty-three years its honored and efficient President, an / WHEREAS, By his extreme amiability and warm heartedness coupled with a high sense of business equities and sterling integrity he has endeared himself to us while living and left behind him a memory which we shall delight to cherish, and / WHEREAS, These and many other ennobling traits of character influence us to desire to testify our appreciation of his life among us; therefore / *Resolved*, That in the removal from this Board of our honored President and director of whose invaluable services death has deprived up, we feel that this company has suffered an irreparable loss, and that we but voice the sentiment of the people of this city that they have been deprived of a friend and leader whose life has been devoted to the best interest of the community. / *Resolved*, That we extend to the bereaved family our heartfelt sympathy in the great loss they have sustained and can only commend them to the tender mercies of 'One too wise to err.' / *Resolved*, That a copy of these proceedings be presented to the family of the deceased and also furnished *The Carbondale Leader* for publication. / Alfred Pascoe / C. E. Spencer. / Com." (*Carbondale Leader*, June 26, 1891, p. 4)

The account of the funeral of R. Manville that is given here is an interesting sociological document unto itself. At the same time, the listing in this account of the names of the railroad and mining personnel who attended this funeral make this account especially interesting as a "Who's Who" in railroading and mining in Carbondale and environs in 1891.

“FUNERAL OF R. MANVILLE. / A Large Number of Distinguished Men at the Service. /

The last rites over the mortal remains of the late Superintendent Manville took place yesterday afternoon at four o'clock in Trinity church and the gathering that assembled to honor the memory of a beloved man was a notable one. In the assemblage were many persons of distinction, among them Col. and Mrs. H. M. Boies, of Scranton; ex-Congressman Jadwin, of Honesdale; Horace G. Young, of Albany, General Manager of the Delaware & Hudson Canal Company; John Jermyn, of Scranton; W. F. Hallstead, of Scranton, General Manager of the Delaware, Lackawanna and Western Railroad; John B. Smith, of Dunmore, President of the Erie & Wyoming Valley Railroad; R. Livingston Crosby, private secretary to R. M. Olyphant, President of the D. & H. C. Co.; Hon. H. M. Seeley, of Honesdale, President Judge of Wayne County; E. D. Moyles, of Albany, Assistant Superintendent of the National Express Company; D. Wilson, of New York, General Accountant of the D. & H. C. Co.; R. C. Blackall, of Albany, Superintendent of Machinery, D. & H. C. Co.; C. D. Hammond, of Albany, Superintendent Northern Division, D. & H. C. Co.; M. C. Carr, Supt. of Scranton Division, New York, Ontario & Western Railway; A. H. Vandling, of Scranton, Supt. D. & H. Mine Department; J. M. Chittenden, of Scranton, Asst. Supt. D. & H. Mine Department; W. R. Storrs, Gen'l Supt. Delaware Lackawanna & Western Railroad; William Muir, of Honesdale, Supt. D. & H. Canal; Sidney Broadbent, of Scranton, Supt. Dickson Manufacturing Company; George H. Catlin, Vice President Second National Bank, Scranton; Capt. James Manville, of Whitehall, N. Y., a brother of the deceased; W. W. Manness, of Scranton; Genl. Supt. Lackawanna Iron & Coal Company; Miss Manness, Miss Reynolds, Mr. and Mrs. George L. Dickson; Mr. and Mrs. Walter Dickson; Mrs. Benj. Greenstead, John H. Howarth, R. W. Kellow, F. C. Platt, C. D. Simpson, O. S. Johnson, J. H. Torrey, Esq., H. V. Hatton, Thomas Moore, R. N. Patterson, Esq., Charles McMullen, William H. Richmond, Rev. H. C. Swentzel, of Scranton; H. Z. Russell, Esq., Charles Ball, Dr. Dusenberry, H. J. Conger, G. F. Wilbur, Charles Peterson, T. F. Torrey, Esq., and M. B. Allen, of Honesdale; John S. Law and John Sawyer, of New York City, W. B. Culver, of Pittston; A. P. Bedford, of Wilkes-Barre, and A. L. Patterson, of Waymart. / Up to the time of service people visited the church in a continual stream to view the face. The people were taken care of by seven ushers, S. A. Mullen, Charles Orchard, Eli Birs, E. C. Harnden, J. H. Orchard, N. L. Moon, J. F. Wheeler and Frank Hubbard, and the arrangements for the service were complete in every detail. The church was not crowded uncomfortably when the service began, but it was not owing to lack of numbers. Many considerate persons remained on the outside to leave room for those who had come from a distance and the result was ample space for those who were inside. It was Mr. Manville's expressed wish before he died there should be no ostentation over his remains, and his desire was carried out. No sermon was preached, and the simple but impressive burial service of the Episcopal church constituted all of the public rites.

The Rev. E. J. Balsley, rector of Trinity was assisted by the Rev. G. C. Hall, of Honesdale, and the Rev. B. H. Abbot, of this city. Mr. Balsley led in prayer, Mr. Hall read a portion of St. Paul's First Epistle to the Corinthians, and a quintet composed of Miss Lizzie Abbott, Mrs. F. M. Leonard, Mrs. T. Griffin Smith, A. J. Wells, and T. Griffin Smith sang the familiar hymn, 'How Firm a Foundation,' and chanted the prayers, and this was all. / The acting pall bearers were Hon. C. E. Rettew, E. M. Peck, S. A. McMullen, Thomas Orchard, William Bowers, Andrew Wylie [Wyllie] and Pierce Butler. The honorary pall bearers were George L. Dickson, Hon. J. B. Van Bergen, W. F. Hallstead, W. R. Storrs, A. H. Vandling, William Muir, H. J. Conger, John B. Smith, J. M. Chittenden, G. F. Wilbur, W. W. Bronson, William McMullen, R. W. Kellow. / The body remained in the church until half past six this morning when it was taken to the Seventh Avenue station for removal to Troy for cremation, in charge of a number of relatives and intimate friends. Vice President H. G. Young's private car was placed at the disposal of the party." (*Carbondale Leader*, June 27, 1891, p. 4)

The content of Rollin Manville's will was published in the July 9, 1891 issue of the Carbondale Leader:

"WILL OF ROLLIN MANVILLE. / He Divides His Property Among His Wife and Children. / The will of Rollin Manville, late of Carbondale, was placed on record in the Register's office yesterday and letters granted to the widow, Mrs. Helen M. Manville, and the son of the decedent, C. Rollin Manville. / The will was signed on August 16, 1882, and was witnessed by Hon. J. B. Van Bergen and Mr. George L. Dickson. Mr. Manville directs that all of the household goods and silverware shall go to his widow and all the other property, real and personal, shall be divided in four equal parts to go to his wife Helen M., his son, C. Rollin, his son Willis, and his daughter, Miss Florence." (*Carbondale Leader*, July 9, 1891, page 3)

Given the prominent position of the Manville family in the community, the newspapers chronicled their activities. Here is the newspaper notice of the sleighing accident that befell Rollin Manville's son, Willis, in 1875:

“Master Willis Manville, son of Superintendent Manville, was badly bruised outwardly and injured internally, last Friday afternoon, while coasting on Graded School Hill. While coming along swiftly on his fast sled, one runner at the foot of the hill ran into a deep rut in the sidewalk, throwing him against a post. It was at first reported that bones were broken, but we are happy to learn that such is not the case.” (*Carbondale Advance*, February 6, 1875, p. 3)

Here are three articles from the *Carbondale Leader* about European travel undertaken by Mrs. Rollin Manville and her son Florence and her son C. R. in 1881:

Mrs Manville and party to Europe:

“Mrs. R. Manville, with her daughter Miss Florence Manville, and son, C. R. Manville, will sail from New York tomorrow, on the steamship Egypt, for Europe. The trip is made principally for the benefit of Mrs. Manville’s health.” (*Carbondale Leader*, June 3, 1881, p. 4)

“Mrs. R. Manville, her son C. R. Manville and daughter Mrs. Florence Manville sailed from New York for Europe on the steamer Egypt of the National Line, on Thursday of last week, to be absent about two months.” (*Carbondale Advance*, June 11, 1881, p. 3)

“Mrs. R. Manville and party arrived home from their European trip last Tuesday. They are in excellent health, and return with many delightful memories of the journey. A cordial greeting was tendered them by their many friends.” (*Carbondale Leader*, September 30, 1881, p. 4)

Death of W. A. Manville

Here is the notice of the death of W. A. Manville that was published in the *Carbondale Leader* in April 1897:

"W. A. MANVILLE IS NO MORE. / His Sudden Death Last Evening Comes as a Great and Sad Shock to His Family and the Community. / It was a sad shock that the community was given this morning in the news of the death of W. A. Manville which occurred at his home on North Main street last night. The announcement of his demise came as a veritable blow to the great majority—who did not realize that Mr. Manville had been ailing and who could only remember him as of rugged and healthful appearance. / It is but a few days since he was participating in the active scenes and enjoyments of life and his untimely demise forcibly illustrates the adage that 'in the midst of life we are in death.' Few of even his intimate friends

had heard of his illness and the suddenness of the attack with its sad ending is such that even the immediate family can scarcely realize as yet their loss. On every side were heard today pained expressions over the sorrowful event and deep sympathy was universally expressed for the family in their severe affliction. / Willis Arthur Manville was born in Honesdale on January 29, 1861. When he was but three years of age the family removed to this city and since that time he has been a continuous resident here. It is safe to say that he was known to every Carbondalian and his personal acquaintanceship had grown in the last few years to a point which embraced nearly the entire valley. That he had a host of warm friends in every city and town in this vicinity is attested by the flood of mourning telegrams that have come over the wires to the bereaved family today. / Educated in the public and private schools of this city he grew up with the men who are today taking the more active part in the life and by them he was always held in close fellowship. Of a generous, companionable disposition he attracted friends to him at once and their number is now legion. / After leaving school he entered the employ of the Hendrick Manufacturing company where he served in a responsible position for several years. Following this he became one of the force at the Delaware & Hudson general offices in this city and soon after was selected to fill the position of soliciting and freight agent for that company at Wilkes-Barre. He assumed those duties in November, 1887, and continued in that capacity till his death. / On March 13, 1889 he was united in marriage to Miss May Baker of this city who survives him. Mr. Manville had been accustomed to occasional severe spells of sickness and following one took an ocean voyage to repair his health. His stay in England was very beneficial but his constitution could not be said to be of the strongest. / About eight months ago he commenced to complain of a deep seated trouble—but only a few knew of his illness. On Wednesday last Mr. and Mrs. Manville went to New York for a short stay and while there Mr. Manville was attacked by a sinking spell. He consulted Dr. Allen McLane Hamilton who gave it as his opinion that he was suffering from valvular trouble of the heart. At the railroad station on Saturday last and on the train coming home he again had sinking spells and from that time on they were frequent till the end. Death came peacefully at 11:30 o'clock last night while the family were gathered about the bedside. / An autopsy performed by Dr. Bailey* of this city and Dr. Burnett of Scranton this morning revealed the fact that both the liver and the heart had been affected. Deceased was a member of Trinity Episcopal church this city and in a social way was numbered among the members of the Westmoreland club of Wilkes-Barre. The funeral services over the remains will take place at Trinity church tomorrow afternoon at 4 o'clock. The remains will be taken to Troy for interment leaving this city on Thursday morning on the 6:25 o'clock train." (clipping in a Gritman scrapbook, dated Tuesday, April 13, 1897) The following clipping is given immediately following the preceding in the Gritman scrapbook: "The body remained in the church all night

and from five o'clock to nine the hours during which the casket was open there was a steady stream of people going into the church to take a last look at the features of the man whom they had known so well in life. At nine o'clock another short service was held for the benefit of the family alone. / Among the prominent out-of-town people at the funeral were Mr. and Mrs. David Zeiley, Jr., John D. Zeiley, D. Gilbert Hollis, Brooklyn; Miss Clara Manville, Edward J. Manville, Whitehall, N. Y., Mrs. Edward Ambuhl, Ghent, N. Y., John G. Law, New York city; Miss Haff, Mont Clair, N. J., Mr. and Mrs. G. L. Dickson, George Jermyn, James H. Torrey, city solicitor, C. S. Weston, D. & H land agent, E. W. Drinker, Lehigh division freight agent, J. P. Dickson, Delaware & Hudson general freight agent, W. G. Liddle, Scranton; J. B. Knecht, chief freight clerk, James Brady, yard master, J. F. Abbott, I. H. Strauss, Pennsylvania agent, A Newbury, Pennsylvania train master, Wilkes-Barre; G. W. Lane, William Muir, H. J. Congor, Honesdale; W. Hickok, agent Plymouth Junction. /This morning the casket was taken from the church and placed upon the Saratoga express; for removal to Troy, N. Y. Superintendent C. R. Manville, Rev. Charles Lee, F. E. Dennis, N. L. Moon of this city and W. M. Dickson of Scranton, occupied a special car attached to the train and accompanied the remains to their destination. At Troy the body will be incinerated. The gentlemen who acted as pallbearers both yesterday afternoon and this morning were: L. A. Bassett, N. L. Moon, J. H. Orchard, W. B. Gritman, H. C. Butler, F. E. Dennis, Charles Orchard and W. M. Dickson, of Scranton."

*Dr. Bailey: *1880* (p. 452A): "D. LELAND BAILEY, M. D., was born in Susquehanna county, Pa., January 27th, 1851; first came to Carbondale in 1873; graduated from the University of New York in 1875, and began practice in Dundaff. In 1879 he removed to Carbondale. He married Elizabeth Clark, of Clark's Green, Pa."

C. R. Manville Named Superintendent of the Pennsylvania Division on July 15, 1891:

Rollin Manville's son, C. R. Manville, was named Superintendent of the Pennsylvania Division of the Delaware & Hudson Canal Company, on July 15, 1891, and served the D&H in that capacity until December 1, 1903, when he resigned, to be succeeded by H. G. Gilpin who, at the time, was superintendent of the New York, Susquehanna and Western (headquarters in Jersey City). See article titled "Resignation of Supt. [C. R.] Manville], dated November 28, 1903, in Gritman scrapbook.

C. R. Manville gives 100 flags to railroad engineers:

"MR. [C. R.] MANVILLE' [sic] PATRIOTISM / Shown by His Gift to the Railroad Engineers. / The engineers on the Delaware & Hudson are to be found now and then craning their necks to get a better view of the miniature 'old glory' which proudly floats from its staff in the sand box cover. / The flags, over one hundred of them, were the gift of superintendent C. R. Manville as an illustration of his patriotism." (*Carbondale Leader*, May 2, 1898, p. 5). Note: In the same issue of the *Carbondale Leader*, it was announced, on page 5, that the American squadron, under Commodore Dewey, had destroyed Spain's Asiatic fleet in the Battle of Manila.

The following notice was published in the local newspapers when Mrs. W.A. Manville (sister-in-law of C. R. Manville) embarked from New York to begin a European tour:

"GONE TO EUROPE. / Mrs. W. A. Manville sailed from New York on Saturday by the Minnehah for Cowes, England. Her tour of Europe will cover nearly four months and will extend from Norway to the southern part of Italy. Stops will be made at the principal cities including Berlin, Paris, Venice, Rome and London. The tour also includes a coaching trip through England." (clipping in Gritman scrapbook, dated Friday, June 13, 1902)

O. D. Shepherd Excursus

O. D. Shepherd, Esq. Chief Engineer of the D. & H. C. Co. in 1870 (and also before and after 1870). It was he, who in 1870, determined the altitude at the head of each of the planes on the Gravity Railroad. Those altitudes are reported throughout these volumes.

It was he who designed and oversaw the construction in 1867 of what became known--at the recommendation of Hiram Marsh--as "Shepherd's" Crook on the light track of the Gravity Railroad. We will have a look at that "crook" in detail later in this volume. For the present, however, be it noted that on the outer side of the crook (in the valley) there was a wall of stone thirty-five feet in height in the centre and upon this there was a crib work of another thirty-five feet and on top of this there was a trestle work of twenty-five feet in height. It was partly filled with earth and stone and some years later it was completely filled with culm. We will show photos of this later in the volume.

Following his work for the D&H, O. D. Shepherd, a civil engineer, worked by the City of Carbondale, the Archbald Water Company, and the Northwest Coal Co's works in Carbondale (served as superintendent). In 1887 he moved to Scranton, where he died.

Here are seven newspaper clippings about O. D. Shepherd, from Carbondale newspapers in the period October 26, 1872—February 3, 1887:

"Mr. O. D. Shepherd, of the D. & H. C. Company, and wife, are again permanently stopping at the Harrison House." (*Carbondale Leader*, October 26, 1872, p. 3)

"Mr. and Mrs. O. D. Shepherd, who have boarded at the Harrison House for the past two years, commenced housekeeping last week in Mr. Herbert's new house on River street." (*Carbondale Leader*, September 13, 1873, p. 2)

“Mr. O. D. Shepherd, engineer for the Archbald Water Company, will receive sealed proposals for doing the clearing and grubbing, rock excavating, cribbing, embankment, culvert masonry, trenching, etc. for the proposed work, until Tuesday, July 13, at the office of Jones, Simpson & Co., Archbald, Pa. Copies of the specifications and blank forms of contract may be obtained at the above office on and after July 7.” (*Carbondale Leader*, July 3, 1875, p. 3)

“O. D. Shepherd, formerly a resident engineer here, and wife, are the guests of Mr. and Mrs. D. O. Jones.” (*Carbondale Advance*, August 2, 1879, p. 3)

“O. D. Shepherd has resigned a superintendent of the Northwest Coal Co’s works in this city, and J. L. Crawford, superintendent of the Edgerton coal works Jermyn, has been appointed to the position formerly held by Mr. Shepherd.” (*The Journal*, June 10, 1886, p. 3)

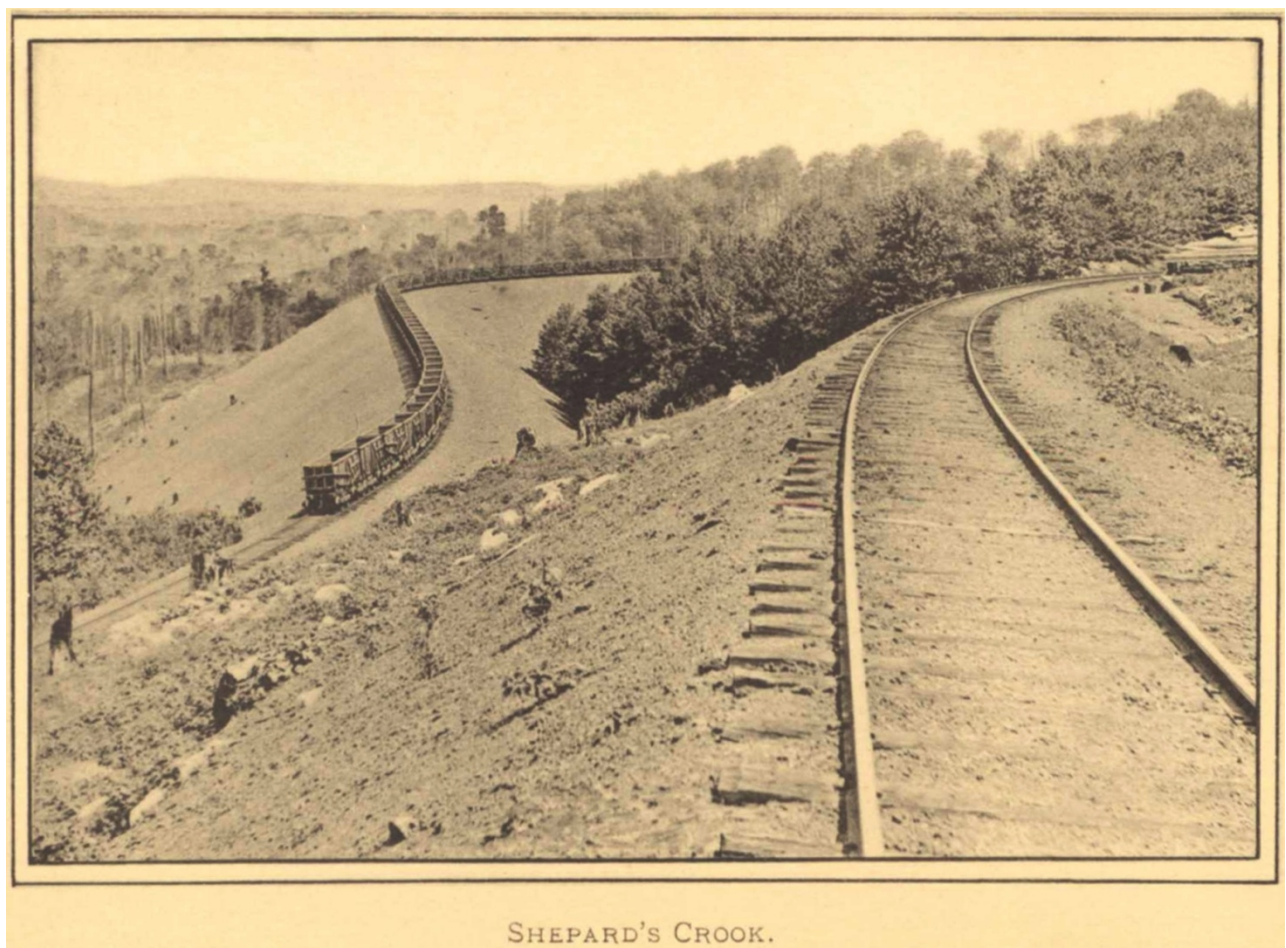
[O. D. Shepherd moves to Scranton 1887] “O. D. Shepherd, of Carbondale, a Civil engineer well known to many Scrantonians, and to whose engineering skill the Delaware and Hudson Canal Company owes the attractiveness of Shepherd’s Crook, a few miles above Carbondale, has removed to Scranton. Mr. Shepherd will open an office on Wyoming avenue.—*Republican*” (*The Journal*, February 3, 1887, p. 3)

In one of the Gritman scrapbooks in the archives of the Carbondale Historical Society is a short article from the Scranton newspaper, *The Republican*, with a sketch of Shepherd’s Crook, based on the Hensel view of the crook. The undated clipping was published at the time of O. D. Shepherd’s funeral:

“The funeral of O. D. Shepard, under whose supervision the famous horseshoe bend on the D. & H. road near Carbondale, known as ‘Shepard’s Crook’ was made, and who died suddenly Tuesday afternoon at Carbondale, as already told in *The Republican*, was held yesterday. / Mr. Shepard was city engineer there, and it is regarded as a singular coincidence that on the day he died the ‘crook’ was abandoned for use by the road, a new route having been laid with track for service in its place. / Mr. Shepard was born in Saratoga county, New York, September 4, 1839. He went to Carbondale in 1865, where he was employed for a long term of years as a civil engineer by the Delaware and Hudson company. / The funeral service was conducted by Rev. Charles Lee. The burial was in Forest Hill cemetery, this city.”

O. S. Shepherd died on January 30, 1900. This we know from the Certificate of Death for the man that is in the archives of the Carbondale Historical Society. From that certificate, we learn that he died, after an illness of 5 days, on January 30, 1900, of pneumonia. On that certificate his age is given as 60 years, 4 months, and 26 days. He was born in New York state; his occupation is listed as civil engineer; he was married at the time of death and lived on Washington Avenue in Scranton's first ward for ten months prior to his death. He was buried on February 1 or 2, 1900, in Forest Hills Cemetery, Scranton.

Here is a photograph of Shepherd's Crook that was taken by the Carbondale photographer, W. B. Foster. An original copy of this booklet is in the archives of the Carbondale Historical Society.



Certificate of Death: Oliver D. Shepherd

~ Dr Day ~

This constitutes one Certificate; to be carefully filled by both Physician and Undertaker, and taken by the Undertaker to the Office of "the Board of Health," where a permit to bury will be issued. Penalty, from five to twenty dollars.

The special attention of Physicians is respectfully invited to the remarks below.

The Board of Health of the City of Carbondale.

"The Physician who attended any person in a last illness is responsible for the preparation of a Certificate as below indicated, and the Undertaker must file it, together with his own Certificate, in the office of the Board of Health before a permit for burial can be issued."

WRITE LEGIBLY, WITH PEN AND INK, AND SPELL CORRECTLY.

PHYSICIAN'S CERTIFICATE OF DEATH.

1. Full Name of Deceased, Oliver D. Shepherd
2. Color, White
3. Sex, Male
4. Age, 60 years, 4 months, 26 days.
5. Married, Single, Widow or Widower, Married
6. Occupation, Civil Engineer
7. Date of Death, Jan 30 1891 1900
8. Cause of Death, Pneumonia
9. Duration of Last Illness, 5 days
10. Date of Certificate, Jan 30 1891 1900

Office or Residence, No. _____ M. D. John D. Day

UNDERTAKER'S CERTIFICATE

IN RELATION TO DECEASED.

UNDERTAKERS WILL PLEASE NOTE REMARKS AT THE TOP OF THIS CERTIFICATE.

11. When a Minor, { Name of Father, _____
Name of Mother, _____
12. Birthplace, New York State
13. Residence, No. Washington Avenue, Street, 1st Ward.
14. Time of Residence therein, 10 months
15. Place of Previous Residence, Scranton Pa
16. Place of Intended Interment, Forest Hill Cemetery Scranton Pa
17. Date of Intended Interment, Feb 1st or 2nd 1891 1900

Office or Residence, No. 367 Church Avenue, Street, 1st Ward. Undertaker, W B Kirby

Summary of Changes for 1866-1868 from *Century of Progress*:

"To provide for the additional tonnage expected upon the completion of the railroad about to be constructed from Green Ridge to Union Junction [[See the discussion of the relationship between the purchase of coal lands in the Wilkes-Barre area in the late 1860s and the revisions that were effected in 1866-1868 in *A Century of Progress*, pp. 196-202.] further alterations and improvements in the Gravity railroad were commenced in 1866. These improvements, which were of considerable extent, consisted of enlargement of the dock facilities and dumping ground, alteration of plane No. 13 at Honesdale* and the construction of a new light car track from Farview down the west side of the mountain to Carbondale, a distance of six miles, on which the cars moved by gravity, eliminating the use of two ascending and eight descending planes. This work was continued through 1867 and completed in the following year, the new track being opened for the movement of light cars on April 21, 1868. . . These alterations, with the exception of some minor changes, were the last made on the Gravity railroad." *Century of Progress*, pp. 200-201.

*To date we have not determined what changes were made to Plane No. 13 at this time. Significant changes were made at the time of the 1859 configuration and we have described those changes in that volume. We shall keep digging, and hopefully we will determine what, if any, changes to Plane No. 13 were made at the time of the 1868 configuration.

New (and higher) bridges were necessary with the 1868 configuration so that passenger vehicles could pass under them:

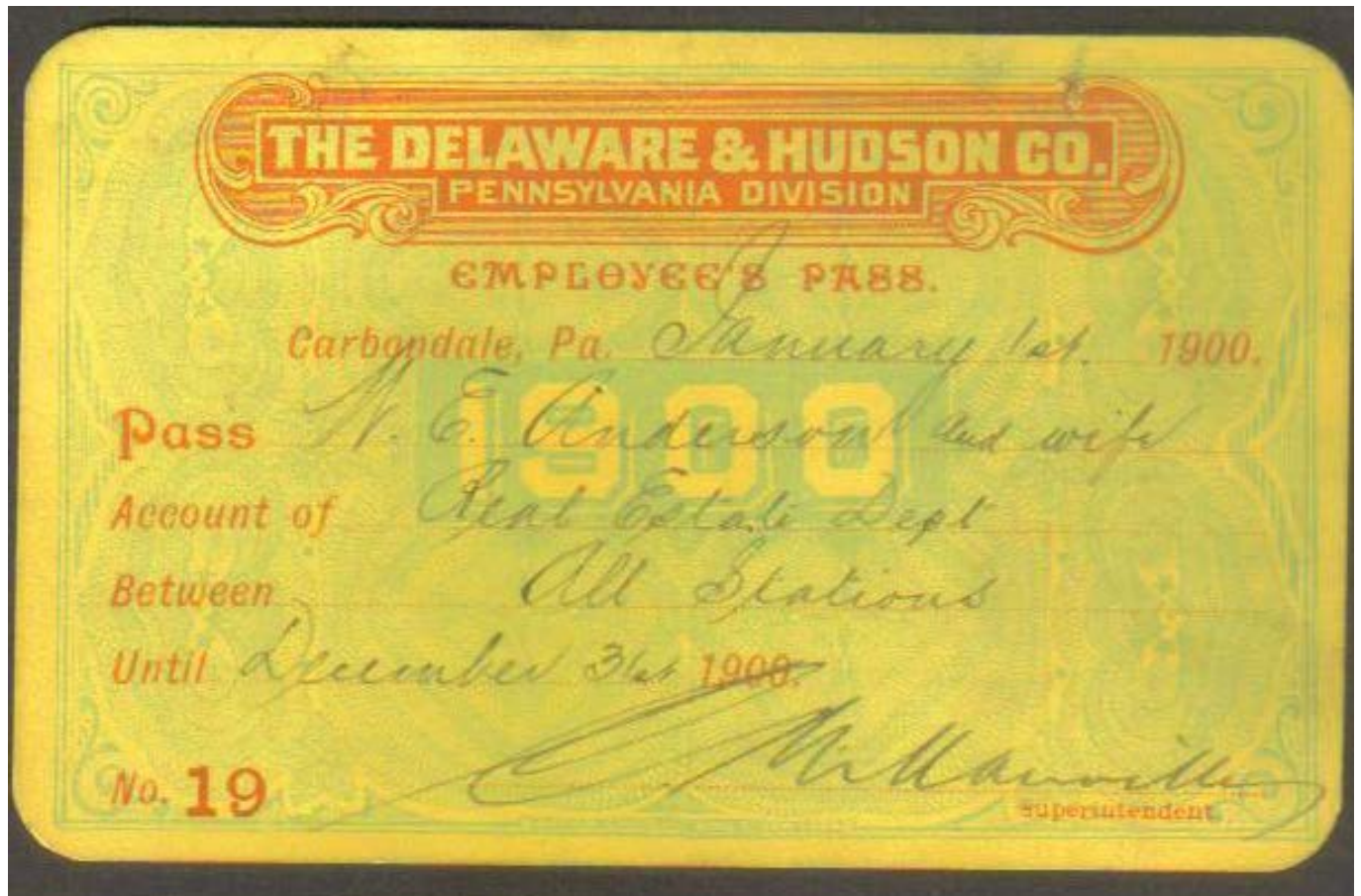
"The Delaware and Hudson Canal Company have so altered their railroad traversing the Moosic Mountain as to dispense, on the planes, with empty cars for drawing up loaded ones. They have further ordered surveys for a new track for empty cars from the top of the Mountain down to Carbondale, so as to make a continuous descent. The bridges on this new track have been contracted for. They are to be some feet higher than is necessary for the passage under them of coal cars. This fact, taken in connection with others, influences the belief that an experiment will be made, upon the completion of this track, to put on passenger cars, an experiment which has frequently been talked of, and which these changes will render practicable. The new work is to be prosecuted without delay.—*Honesdale Republic*." (*Carbondale Advance*, Saturday, September 1, 1866, p. 2)

Summary by W. E. Anderson of Changes for 1866-1868:

“The increasing development of the company’s mines taxed the capacity of the railroad and, in 1866, the three double track planes between Farview and Waymart were replaced by four single track planes. Numbers Nine to Twelve, for lowering the loaded cars and three single track planes, Numbers Eighteen to Twenty, for raising the empties. Between 1866 and 1869 planes Four to Eight were made single track for upgrade movement only [Why would 1, 2, and 3 have been left double-tracked? Probably because there was so much rail activity in that area—Blakely Level, Racket Brook washery, cripple car track—that the double tracks were a practical necessity. With No. 4 being single tracked, the D&H could send all the coal to market that it chose to; it also made it possible to meet the needs of the Racket Brook breaker] and a location for gravity movement of the returning light cars was developed from the head of Number Twenty at Farview, around Shepherd’s Crook to a connection with the Blakely level. The loaded and light car movements were now entirely independent of each other and the capacity of the road was greatly increased. No further changes, except of a minor character, were made until the planes were abandoned in 1899. . . . Grateful acknowledgement is made to W. E. Anderson, assistant engineer, who, in his long association with the Company, has gathered and preserved valuable information embracing the construction and operation of the Company’s lines for various periods of their development, and, from his notes, has furnished the material for this article.” (Our Own ‘Gravity Road’, pp. 9-10, *The Delaware and Hudson Company Bulletin*, July 15, 1925) SRP note: W. E. Anderson is the ultimate authority on the Gravity Railroad, and it is especially wonderful that his notes were consulted at the time that this article was written in 1925.

W.E. Anderson's D&H Pass for 1900:

The D&H Railroad pass shown below bears the signature of C. R. Manville. This pass was issued at Carbondale to "W. E. Anderson and wife" on January 1, 1900, to be valid for the whole year 1900, between all stations. Low ranking employees usually got day passes; higher ups got division passes; officers got system passes; "exchanges" were given to officers of other railroads. Members of the clergy and politicians frequently were given local passes.



Empties no longer used to draw up loaded cars, 1866:

“The *Honesdale Republic* of this week has the following: DEL. & HUD.—The Del. & Hud. Canal Company are making arrangements to dispense with the descending planes on the Moosic mountain, between here [Honesdale] and Carbondale, and intend hereafter to have the cars descend by gravity from the summit, both towards Honesdale and Carbondale. This action is rendered necessary by their own rapidly increasing business and the use the Union Coal Company will make of their road. [emphasis added].” (*Carbondale Advance*, Saturday, August 3, 1867, p. 3)

How, specifically, will the Union Coal Company use the D&H road?

6806

Loaded Track: Planes 1-12

- same location as in 1859, except 9-11 were replaced with 9-12
- between 1866 and 1869 planes Four to Eight were made single track for upgrade movement only: no longer any need of "light track" on each of those planes.

“The route of the present [1882] track for loaded cars, from the middle of plane no. 6 to the head of No. 8, at Prompton [in the 1829 configuration?], is very nearly on the same ground as the original road, and with the exception of the part between the D. Blandin place and the canal basis, is the only part which is on the original route.” (*Torrey/Archbald*)

6807

Plane No. 1

- 1,479 feet long (rise 119.39), the longest plane in the system
- Level 1: 1,648 feet long (16.07 feet)
- plane remained double tracked: the north plane became the cripple car track back to the Gravity Shops; some non-crippled empties, as needed, were also let down the light plane/cripple car plane on No. 1 and transferred by means of a switch back near Plane 28 to Coalbrook and Lackawanna breakers; the south plane remained the loaded car track. Note that the cripple car track was double tracked before its descent down the cripple car plane. Note also the multi-tracked level from the head to Plane No. 1 to the foot of Plane No. 2.

As we noted in the 1859 unit, here are the elevation statistics for Plane No. 1 proved by O. D. Shepherd:

“**Altitudes Again.** / We are indebted to O. D. Shepherd for the following elevations, omitting fractions, above tide water, of various points on the Gravity R. R. of the Company: / Foot of No. 1 Plane, Carbondale, 1074 ft.” (*Carbondale Advance*, September 17, 1870, p. 3)

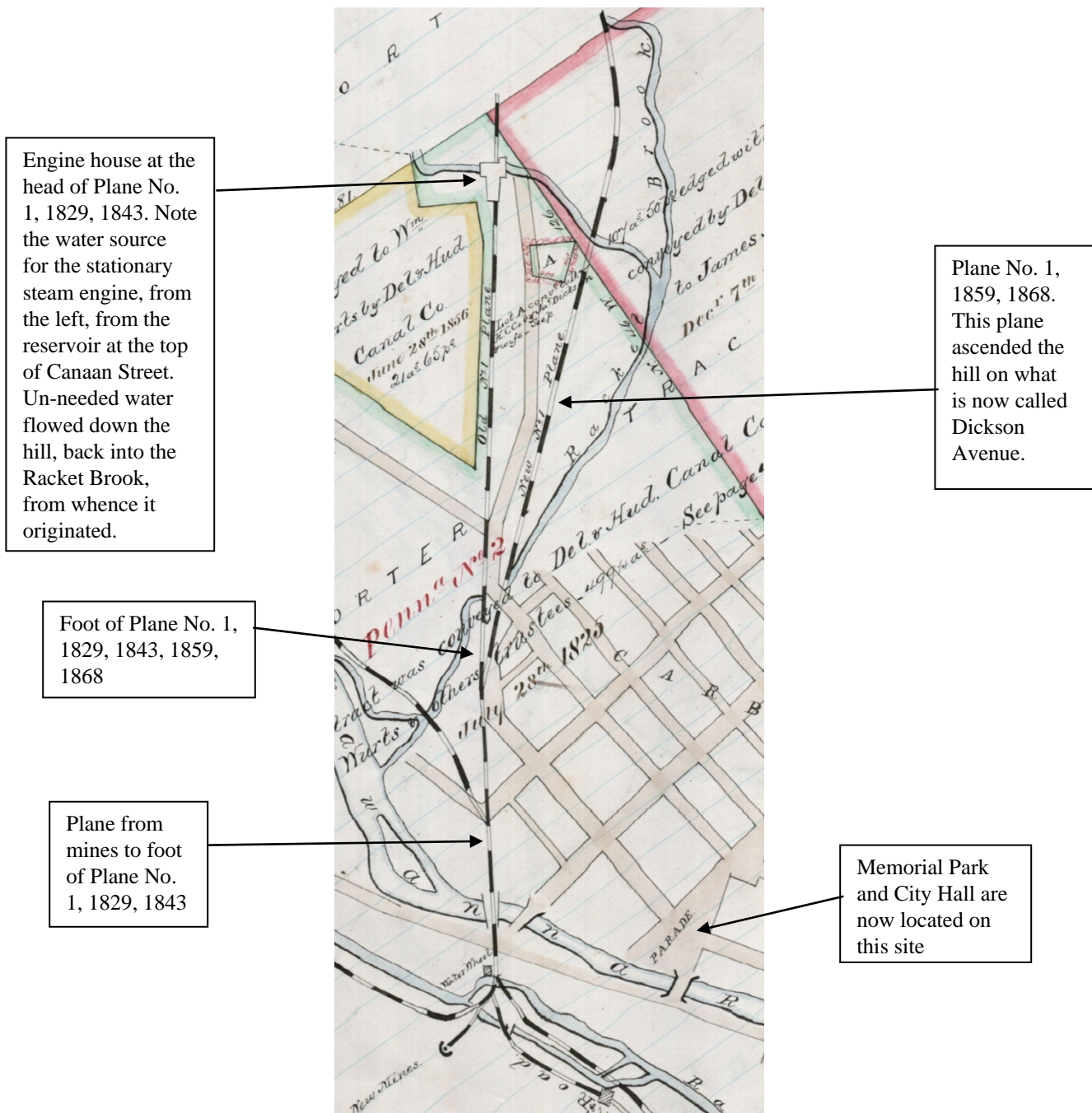
The engineers at the head of Plane No. 1:

“William Ball was the first engineer at the head of No. 1 plane. Mr. [James] Goodfellow resigned his position [first superintendent of motive power on the Gravity road] after a few months, and Mr. Ball was made superintendent of motive power, which position he held until his death in 1859. Whitman Brown succeeded Mr. Ball as engineer at No. 1, who after a few years was transferred to Honesdale. John B. Smith next became engineer. [emphasis added] When the road from Port Griffith to Hawley was built [the Pennsylvania Coal Company’s Gravity Railroad] Mr. [James] Archbald was made general superintendent. He selected from the D. & H. employes such men as he thought would be the best fitted for important positions on that road, and among them was John B. Smith. His upward grade from engineer, superintendent to president of the [Pennsylvania Coal] company, eminently testified to the foresight of Mr. Archbald in his selections. Thomas Shearer, who was for a long time fireman at No. 1, succeeded Mr. Smith, then followed Ulysses Campbell. James Vannan became engineer at No. 1 in 1866, and retained the position until the road was abandoned in 1899.” (*Joslin/Davies*)

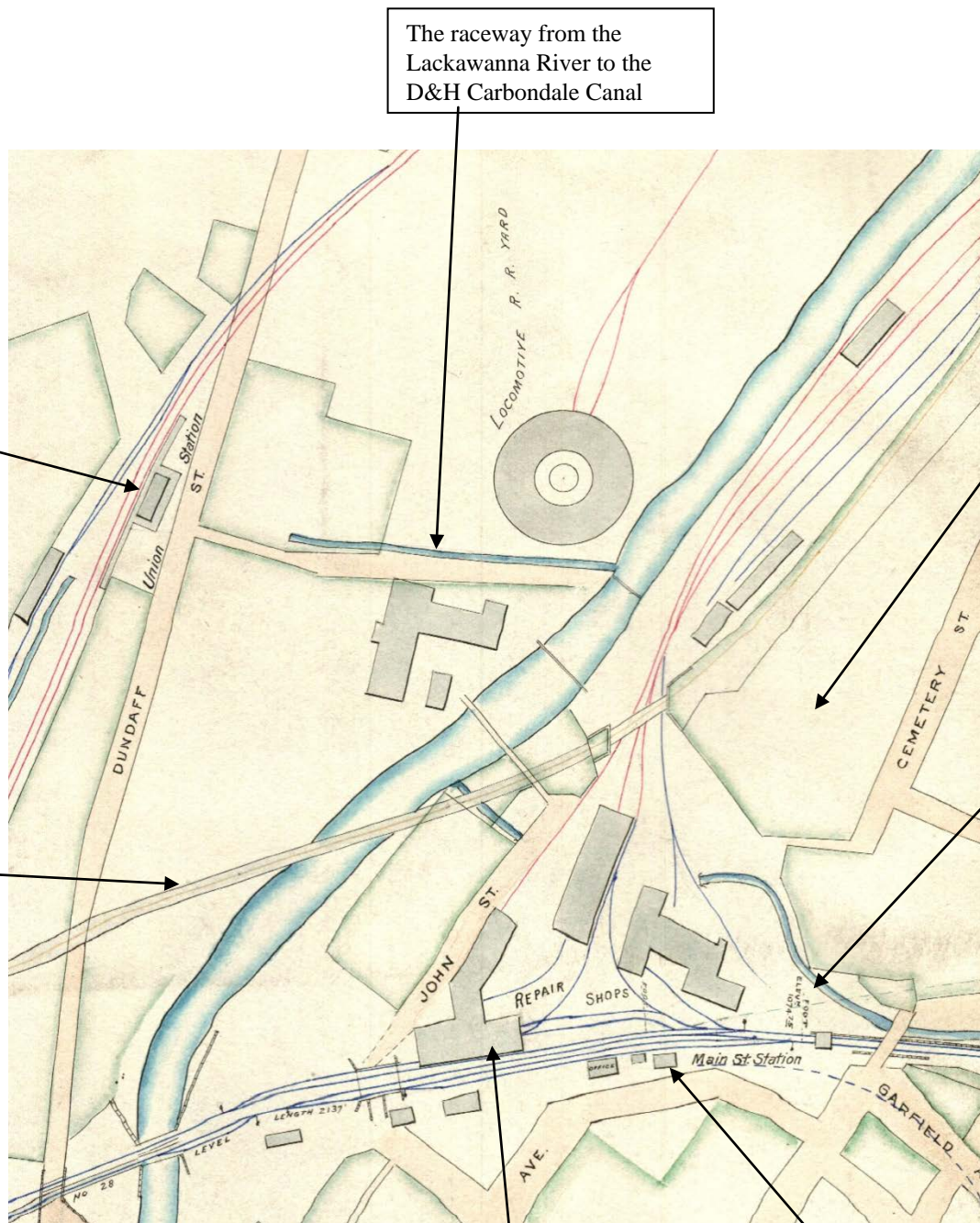
More on James Vannan from 1880:

"JAMES VANNAN, engineer at engine No. 1, was born in Glasgow, Scotland, in 1834, and married Euphemia Harris, of New Jersey. He came to Carbondale in the fall of 1845 and has held his present position since 1860." (pp. 452E-F)

Plane No. 1 (“New No. 1 Plane”) in the 1859 and 1868 configurations (largely the same for both configurations) and its location in relation to the placement of Plane No. 1 in the 1829 and 1843 configurations can be seen on the detail given below from the map in *D&H Deeds Luzerne I*, p. 12, for the deed dated July 28, 1825, between John Wurtz & others, Trustees, and The Delaware & Hudson Canal Company. The deed is on pages 1-6 of that deed book.



1895 D&H Gravity Railroad map: three views: in the first view, we see the foot of the plane; in the second, the remainder of the plane; in the third, the multi-tracked level from the head of Plane No. 1 to the foot of Plane No. 2, also the double-tracked section of the descending cripple car track down Plane No. 1 to the cripple car repair shop. Some empties, as needed, were also let down the light plane on No. 1 [the cripple car track down Plane No. 1] and transferred by means of a switch back near Plane 28 to Coalbrook and Lackawanna breakers. From 1868 on, most of the empties into Carbondale from Honesdale would have come into town from the light track to Lookout Junction and then on into town.



The raceway from the
Lackawanna River to the
D&H Carbondale Canal

The
Bonacci
building is
now on this
site.

Maplewood
Cemetery

Foot of
Plane No. 1,
1859, 1868

The
NYO&W
Railway

The damaged cars that were let down the
cripple car plane (the plane on the north
side of Plane No. 1) were repaired in this
building.

The D&H Main
Street passenger
station

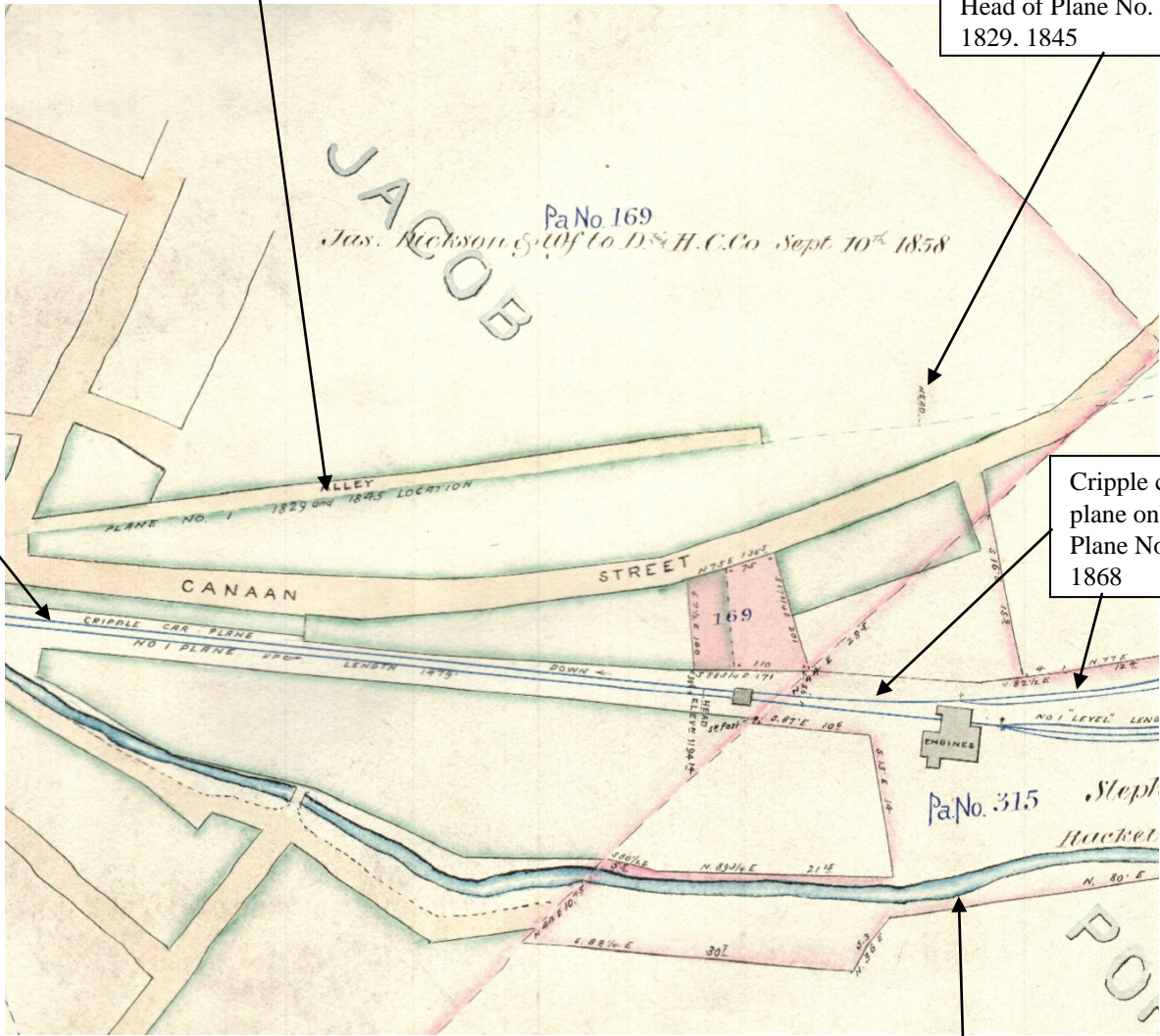
Plane No. 1,
1829, 1845.

Head of Plane No. 1,
1829, 1845

The
North
track on
Plane
No. 1
became
the
Cripple
Car plane
in 1868.

Cripple car
plane on
Plane No. 1,
1868

Racket Brook



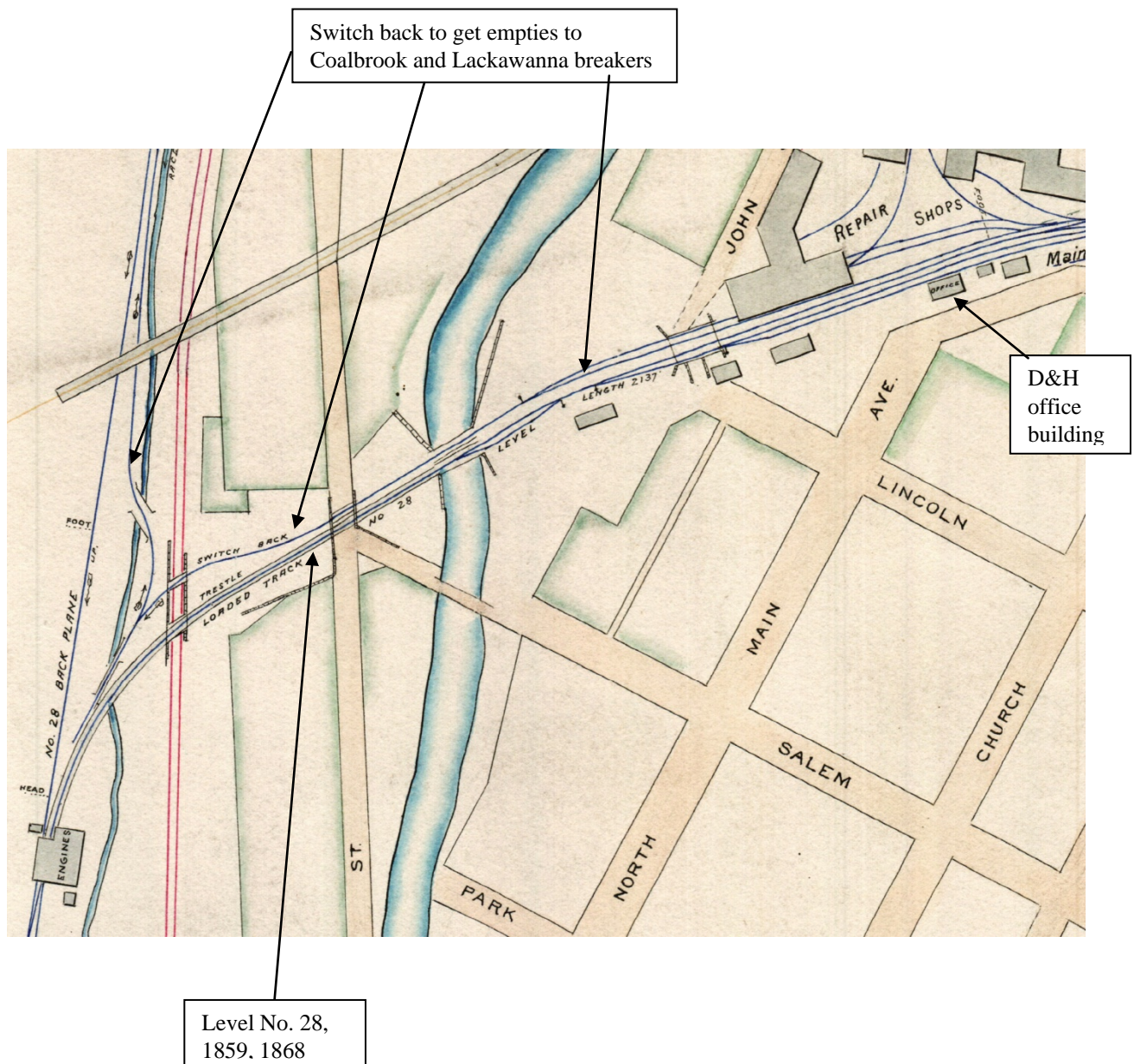
When was the Cripple Car track installed? At the time that the 1868 configuration was installed. Up to that time (when the light track was completely detached from the loaded track), cripples could have been repaired at the repair area at the head of No. 2 or sent on down through the double-tracked system to the foot of No. 1 and the Repair Shop there. In 1868, the north track on Plane No. 1 became the cripple car track, down which "cripples" traveled to the repair shop at the foot of Plane No. 1.

As late as 1869, some cars were still repaired at Plane No. 2 (see James Farrell notice below):

“In 1869 the age of 14, James was transferred to the Transportation Department of the gravity railroad as a car repairman at plane number two, on the unloaded car track, where all cars operating between Honesdale and Carbondale were inspected on each trip and repaired if necessary.” (Biographical sketch of James A. Farrell—“The Engineer Hired a Horse”—in the July 1, 1932 issue (pp. 195-96, 203) of *The Delaware and Hudson Railroad Corporation Bulletin*)

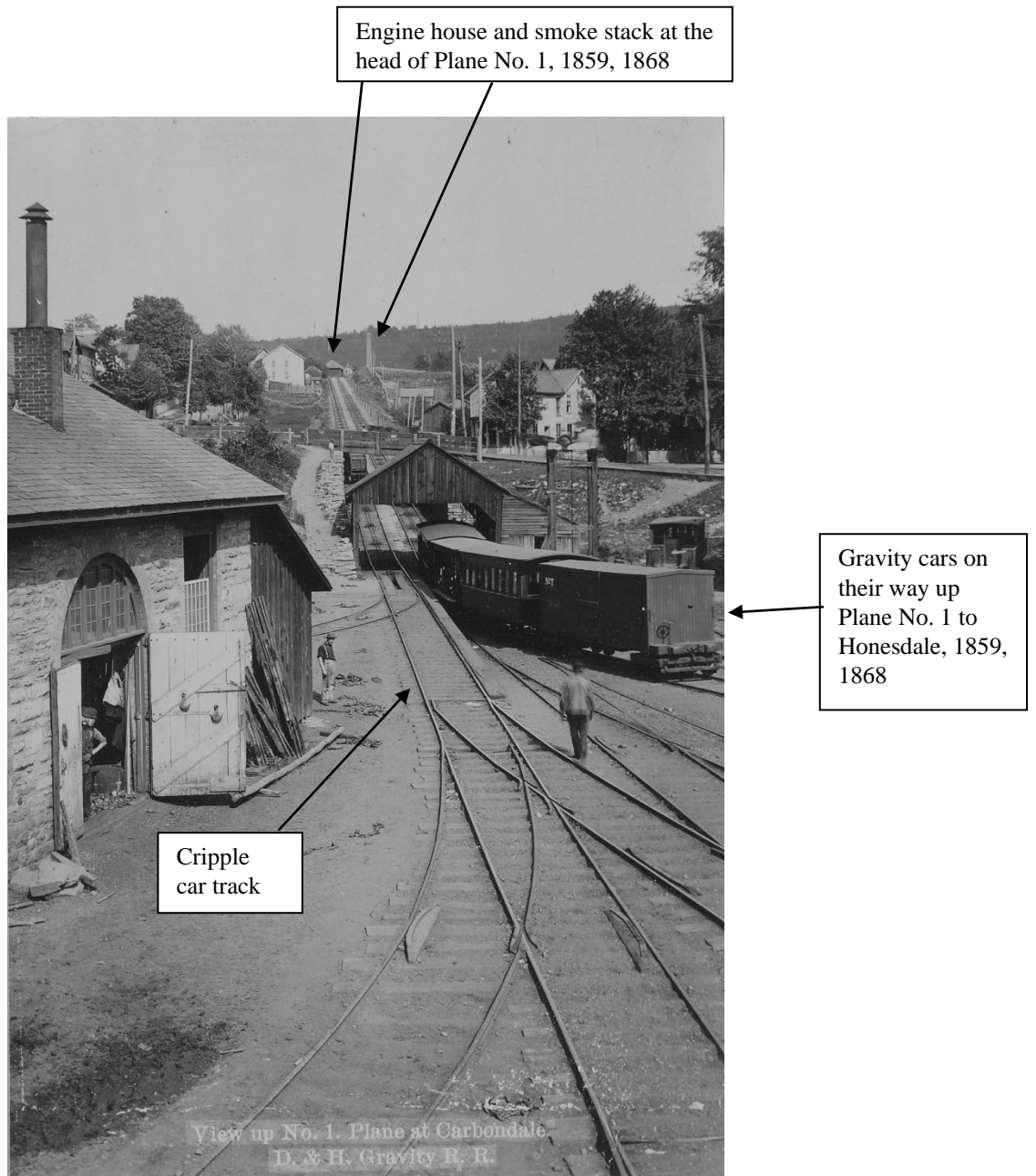
Where was the rail connection between the new light track and the cripple car track? It is shown on the map detail on the following page.

Some empties, as needed, were let down the light plane on No. 1 and transferred by means of a switch back near Plane 28 to the Coalbrook and Lackawanna breakers.



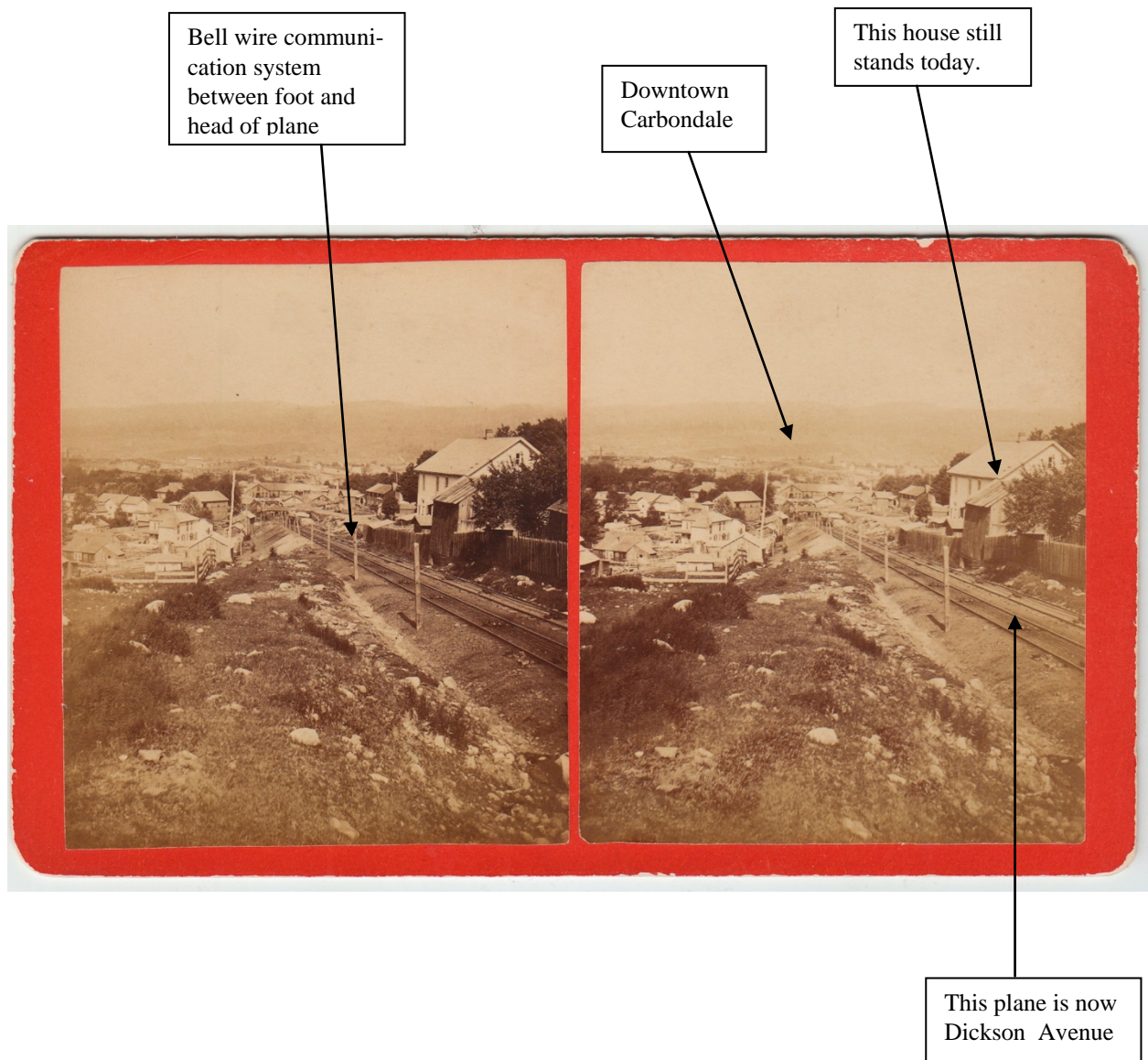
Here is a view up Plane No. 1 by Hensel.

View up No. 1 Plane at Carbondale D. & H. Gravity R. R. from Orig. Photo Souvenir of Del. & Hud. Gravity Road. Published by L. Hensel, Hawley, PA.



Here is Hensel No. 1145: *View of Carbondale, Seen from No. 1 Plane*

The large house to the right of the plane in this view down the plane still stands today (see photograph below).



Plane No. 1 ran down the hill shown in this photograph, taken in the backyard of the Buberniak house at 46 Street. The photograph was taken by John Buberniak on August 1, 2008. The street on the left is now called “Dixon” [it should be “Dickson”] Avenue. The house in the center right of this photograph (pinkish roof, facing to the left) still stands today.



Plane No. 1,
1859, 1868;
now Dixon
Avenue

This house
still stands
today.

Accidents, Facts about the Plane, and Daily Life

Early accident on Plane No. 1:

“For a road with so many planes, and in operation seventy years, very few accidents occurred on it, endangering the lives of employes or passengers. One of the earliest in the memory of the writer [Mr. Joslin], which resulted in a miraculous escape, was of an old man who lived up the line towards the summit. He had to be helped on and off the cars when riding. At the foot of No. 1 plane the men fixed a seat for him on the top of a load of coal. When part way up the plane, something broke and the cars came swiftly to the foot, smashing the three lower cars to pieces, and scattered the coal all over the foot; but the car next the hook on which the old man sat was not even shaken by the crush.” (*Joslin/Davies*)

Several accidents during a snowstorm in 1867:

“Thursday last was a hard day for outdoor work. A snow storm prevailed, but of itself would not have been severe, save for the high wind which accompanied it. In consequence of the wind, the air was kept almost constantly filled with snow, and the snow left where least needed. / The day seemed especially disastrous to our Passenger cars. In the morning an empty train got loose and run back, while being taken up No. 1 Plane, and the cars were badly shattered. The morning Passenger Train also, while on its way to Scranton, collided with a coal train at Olyphant, disabling two cars, but so far as we have learned no passengers were seriously injured. Together it makes more of a chapter in the line of accidents than has occurred during the season.” (*Carbondale Advance*, January 19, 1867, p. 2)

Railroad tracks can be dangerous places to play:

1868: “Fatal Accident. / A very sad accident occurred here on Friday afternoon of last week. at about five o’clock, Richard Maize and some other boys were upon No. 1 Plane, near the foot, and in running over the Railroad track, Richard was tripped by the wire rope that was drawing up a train of loaded cars. Being thrown upon the rail immediately before the cars, they passed over him crushing his limbs, and causing almost immediate death. He was a dutiful and promising boy, and in his ninth year. This afflicting event furnishes another warning to children not to venture needlessly about the Railroad track and the cars.” (*Carbondale Advance*, September 26, 1868, p. 3)

1870: Accident on the level between the head of No. 1 and the foot of No. 2:

“**Accident on the Railroad.** / Geo. Brahhany was run over by the coal cars at No. 1 level, about half a mile above town on Monday morning of this week. His left knee and right foot were crushed, left leg broken, and back and side badly bruised.” (*Carbondale Advance*, July 23, 1870, p. 3)

William Harvey run over on Plane No 1:

1870: "**Sad Accident.** / On Wednesday afternoon of this week Mr. William Harvey, a very respectable citizen of our town, was run over by a loaded coal train on No. 1 Plane, and seriously, but it is hoped not fatally injured. He was engaged in repairing and temping [? , check the original] on the Plane, upon which are both loaded and empty tracks [loaded cars on their way to Honesdale; empty cars for Coalbrook and Lackawanna Breakers; also crippled empties on their way to the cripple car repair shop at the foot of No. 1]. He was standing between the tracks, and to avoid a train of empty cars, stepped upon the loaded track, stumbled upon the rope, was knocked down and run over by an unobserved train of loaded cars. The whole train passed over his left leg, which has been amputated just below the knee, by Dr. A. F. Crans, Surgeon for the Co., assisted by Dr. Charles Burr. Although he is otherwise bruised, he is doing well and likely to recover." (*Carbondale Advance*, October 22, 1870 (Saturday), p. 3)

Joseph Chapman, train dispatcher, born in Montrose:

"JOSEPH CHAPMAN, train dispatcher for the Delaware and Hudson Canal Company, was born in Montrose, Susquehanna county, Pa., in 1844, and married Annie Krotzer, of Providence. He came to Carbondale in 1871, having formerly been station agent at Pittston." (1880, p. 452B)

Photo of February 13, 1872 wreck of cars on Plane No. 1:

In the March 2, 1872 issue of the *Carbondale Advance* (p. 4) there is an ad from the Carbondale photographer, S. Y. Richards, in which he announces that he will close out his business on March 18, 1872. The last paragraph of the ad reads as follows: "A very good PHOTOGRAPHIC VIEW of the wonderful wreck of Cars on No. 1 Plane, on the 13th inst., can be obtained of the subscriber, and nowhere else, as his was the only one taken. S. Y. RICHARDS. / Carbondale, Feb. 16, 1872 [sic]"

150-car smash-up on Plane No. 1 in 1872:

"**The Great 'Smash-Up.'** / The greatest Runaway and Smash-up of coal cars in the history of the road, occurred on the Gravity railroad here on Tuesday morning. / A long train of empty coal cars stood as usual upon that morning on the level extending from the head of Plane No. 1 to the foot of Plane No. 2. The rail was frosty, and a train let down from No. 2 Plane against these, started them, and in the state of the rail, brakes being useless, they shot back rapidly over the angle at No. 1 Engine, and down the Plane. They came rushing pell mell at a fearful speed down the Plane, until when about two thirds down the empty track they encountered a train being let down and suspended by the wire rope from the machinery of the engine. This obstruction caused a tremendous crash, and they piled themselves up, on and off the track in wild confusion. Fortunately, no lives were lost, but the destruction of cars was fearful. About 150, we are told, were engaged in the strange race, of which few escaped serious injury, and many were totally wrecked. / The track was speedily cleared, with the accustomed energy, and hardly had the cars commenced running upon the Plane, when a second runaway occurred, showing the strange tendency of the cars to refuse control on that morning." (*Carbondale Advance*, February 17, 1872, p. 3)

More on the 1872 wreck from the perspective of 1899:

“Saturday’s wreck at No. 1 plane was undoubtedly the last that will occur on that section of the old Gravity. While few accidents have taken place there in the past, No. 1 bears the unenviable distinction of being the scene of the greatest railroad wreck in all history—for the number of cars destroyed. It is now fully twenty-five years since the disaster occurred but it still remains fresh in the minds of all who were residents of Carbondale at the time. Early one Monday morning in February some boys were amusing themselves by letting off the brakes of a long train of light cars standing on a switch at the head of the plane. The cars finally started and the pressure behind them was so great that in a few moments the train was beyond control. Down they rushed over the head of the plane and began to pile up in shattered fragments beside the track as they were thrown from the rails by the safety latches. Such was the force of propulsion by the rear portion of the train that the forward cars were forced over one another till nearly the entire length of the plane was strewn with debris. The news spread like wild fire and there was a general rush to the spot from all parts of the city. Enterprising photographers made pictures of the wreck and one of these was until recently an interesting part of the furniture of No. 1 head house. The official reports to the company showed that 120 cars were demolished or badly injured in the wreck.” [clipping in the Gritman scrapbook, dated Monday, March 13, 1899]

Photographs of this wreck in 1872 were taken. Have any of those photographs come down to us?

Joseph Herbert 2d badly hurt attempting to get on empty platform cars:

1872: “**Sad Accident.** / At about 7 o’clock on Wednesday morning Joseph Herbert 2d, a son of Mr. James Herbert of this city, met with a severe accident near the Head of No. 1 Plane. He was employed on the railroad at No. 2, and being on his way to his work, attempted to get on some empty platform cars, and in doing so fell upon the rail and the cars passed over his left leg, fracturing and crushing it badly. He was conveyed to his home and was cared for by Drs. A. E. Burr and C. Burr. They amputated the limb in the afternoon, and the young man is doing well. He is about 25 years of age, and it is thought will recover with the loss of his limb.” (*Carbondale Advance*, July 20, 1872, p. 3)

Bad accident as a boy attempts to jump on a car at Plane No. 1:

“**ACCIDENTS.**—Joseph Herbert a lad about sixteen years of age, son of Jas. Herbert residing on Welsh Hill, met with a frightful accident about 7 o’clock Wednesday morning. Young Herbert is employed on the D. & H. C. Co.’s gravity road, and, in attempting to jump on a car at No. 1 Head, missed his footing and fell under the car which ran over his left leg just above the knee crushing it in a fearful manner, and breaking his ankle. The Company’s physician living at Scranton, was telegraphed for, but he failed to come, and Dr. A. E. Burr was called upon about noon to amputate the boy’s leg. With the assistance of Dr. Chas. Burr the operation was successfully performed about half past one o’clock in the afternoon, and the boy is now doing well.” (*Carbondale Leader*, July 20, 1872, p. 3)

Accident on back track from foot of No 1:

"Eight or ten rude and barbarous boys were amusing themselves with a hand-car, on Sunday last, on the back-track from foot of No. 1 plane, and one of the party lost his equilibrium, causing the car to injure his left arm." (*Carbondale Leader*, September 14, 1872, p. 3)

John Smith badly hurt on Plane No. 1:

February 18, 1874: "John Smith, a boy, not an employee, fell off and under the cars while going up No. 1 plane, Carbondale; arm badly crushed and had to be amputated." (*PA Auditor General Report*, 1874, p. 129)

New bridge, new sidewalks at the Gravity station at the foot of No. 1:

1874: "The Company has lately rebuilt the bridge over the gravity road near the foot of No. 1, and also newly planked the sidewalk in that vicinity. (*Carbondale Leader*, August 22, 1874, p. 3)

Andrew O'Connell killed on Plane No. 1:

November 8, 1875: "Andrew O'Connell, fell or threw himself before a trip of cars on No. 1 plane, at Carbondale, and was instantly killed." (*PA Auditor General Report*, 1875, p. 232)
Fell or threw himself?

More on the O'Connell accident on Plane No. 1:

1875: "**ACCIDENT AND DEATH.** / Andrew O'Connell, a man about thirty-five years of age, and one of the members of the late firm of O'Connell Brothers, saloon-keepers on Main Street, met with a sudden and horrible death on No. 1 plane between seven and eight o'clock on Monday morning. He started to go up to Mr. Mitchell's on Canaan street for the purpose of arranging, or trying to arrange some matters of business, and walked up the plane instead of the street. For several rods from the foot of the plane he walked along the track up which the loaded cars are drawn, when he stepped off and walked for a short distance on the right hand side of the track. As a trip of six loaded coal cars approached he was observed to step near to the track, and, just before the cars reached him he fell, three cars ran over him, and he was frightfully mangled and instantly killed. Three cars were thrown from the track nearly opposite Mr. Homer Grinnell's residence. There were three men on the trip, who saw O'Connell when he fell. The evidence of these is given below. The body was taken to his residence in Main Street, opposite the Harrison House. Alderman J. G. Thompson summoned the following jury and held the inquest: Patrick McGerry, Patrick Bridget, Jas. Morrison, Martin Gallagher, E. Jifkins, and J. W. Marcy. The testimony of several eye-witnesses to the accident, as well as the testimony of a few people who had seen O'Connell daily for two or three months previous to his tragic death, was taken, and a verdict of accidental death rendered. O'Connell was buried from the Catholic church St. Rose of Lima, on Wednesday afternoon. The following is the testimony: / Abner Avery sworn: I was on the trip on No.1 plane, on the fourth or fifth car; I saw the deceased after the cars passed over him; he was then breathing his last; he died immediately. / W. O. Babcock sworn: I was on the head car of the trip; saw a man standing by the side of the track; he made a move and fell under the cars; I thought he intended to cross the track. / M. O. Bonner sworn: I was on the trip in

question; saw a man standing by the track; saw him stoop over and fall; the three head cars had passed over him when I next got sight of him; he was dying when I got to him; from the position I was in on the trip the man did not have to stoop but little to get out of my sight. / . . . Thomas O'Connell sworn: My brother Andrew has lived for the last two months a sober, steady life, and has abstained from drinking liquor; I supposed he was sane; he was making arrangements as to business for the future as usual, and I believed him to be in his right mind. . . [Testimony also from George Whiting, Michael Munley, E. Robinson, and Patrick Bridget] / From the above testimony the jury came to the conclusion that deceased came to his death by accident, and rendered their verdict to that effect." (*Carbondale Leader*, November 13, 1875, p. 3)

More on the death of Andrew O'Connell from the *Carbondale Advance*:

" . . . He and his brother Thomas had for some years kept a restaurant in a portion of their block opposite the Harrison House, and were generally liked. Last spring they sold the saloon business to Munley Brothers, and have since led a retired life, their income being amply sufficient to meet their wants. 'Andy' purchased the Widow Campbell house on North Terrace Street, which he intended to occupy next spring, and in the meantime had fitted up the suite of rooms over the corner store of their block as a residence. Since retiring from business, he has avoided entirely the use of intoxicants, and had contemplated engaging in some other active business. He had excellent business ability, was prompt, energetic, generous and honorable, and would have had excellent prospects of success in any branch to which he had turned his attention. . . He was tenderly attached to his family, consisting of a worthy and devoted wife, and one son. . . / In his earlier years he had traveled extensively in California and Australia, and delighted in amusing his friends with accounts of his adventures in those far-off regions. . . / Mr. O'Connell was about 37 years of age. His funeral was largely attended on Wednesday afternoon." (*Carbondale Advance*, November 13, 1875, p. 3)

Stone throwing from the bridge over Number 1 Plane:

1878 "**A Narrow Escape.** / As Mr. and Mrs. A. Mitchell were crossing the bridge at No. 1 Plane on Thursday afternoon several young men were amusing themselves with throwing stones at some little boys. One of the missiles struck Mr. Mitchell on the head, necessitating the services of a surgeon. Near the spot where the stone struck, a part of the skull had been removed on account of a former accident. Had the stone struck that place the young man might get a chance to serve the remainder of his life in some penitentiary. As it was, were it not for Mr. M.'s generosity and pity for the mother a pretty severe punishment would be in store. The man is quite penitent and promises to vacate his place at the bridge for something more useful." (*Carbondale Advance*, June 8, 1878, p. 3)

Cars on the wrong side of the angle rush down Plane No. 1:

"A slight smash up of coal Cars occurred at the Foot of No. 1 Plane this Friday morning. They got loose at the head on the wrong side of the angle, and rushed furiously down the empty track to the foot. Several of them were demolished, but very little other damage was done. The passenger cars stood upon the loaded track at the time, but were not disturbed." (*Carbondale Advance*, May 10, 1879, p. 3)

360 plus trips per day in 1879:

"We are informed that between 360 and 380 trips of coal cars are hauled up No. 1 plane daily." (*Carbondale Advance*, September 6, 1879, p. 3)

Joseph Honey killed on Plane No. 1:

"Shocking Accident and Death. / A most appalling accident occurred at No. 1 plane, in this city, on Saturday afternoon last, resulting in the instant death of Mr. Joseph Honey, residing about three miles from Waymart, Wayne county. He was coming to this city to bring his wife, daughter, and grand-daughter. They rode in a one-horse wagon, and he walked most of the way on account of the load. He was going to return alone with the horse and wagon. As he reached town he concluded to cross No. 1 plane to save distance in going to the residence of his son where he wished to call. Cars were running at the time upon the plane, and he was struck by the

train, knocked down, and run over, his head being completely crushed. His death must have been instantaneous. The mutilated fragments were collected, and placed in a coffin, and the funeral services held on Sunday afternoon in the M. E. Church. His age was sixty-two years." (*Carbondale Advance*, November 1, 1879, p. 3)

Fred Baker accepts position with the Honesdale Glass Company:

"Fred Baker, for some months footman at No. 1 plane, resigned his position this week to accept one with the Honesdale Glass works. His pleasant countenance will be missed here." (*Carbondale Advance*, March 13, 1880, p. 3)

Willie Shannon hurt while uncoupling cars at the head of Plane No. 1:

"Serious Accident. / Willie Shannon, a son of Mr. Alexander Shannon, aged about 17, met with a severe accident, on Monday afternoon, just before six o'clock. He was engaged in uncoupling cars at the head of No. 1 plane, and a new hook that did not work easily, caught his hand and tore it pretty thoroughly. Several bones were broken, and the wound is regarded as a serious one. Dr. Wheeler was called, and the next day Dr. Leet also, the company's surgeon. It will undoubtedly disable him for some time." (*Carbondale Advance*, April 24, 1880, p. 3)

Runaway on Plane No 1:

"A "runaway" took place on No. 1 plane on Monday. In some unexplained way the wire rope got off of the drum in the engine house at the head of the plane, while a trip of cars were being pulled up, and when it did so the rope slacked and let the sling attached to the forward car fall out. The five loaded cars comprising the trip, then ran with lightning speed down the plane some hundred feet until they reached a trap purposely constructed to throw such runaways off the rack. All the cars were thrown off, the three on the lower end being overturned and crushed. A trip of empty cars were let down on the track alongside and the spilled coal quickly shoveled up and the cars still full emptied into them. The wrecked cars were then removed. The delay caused in the running of the road by this mishap was very short." (*Carbondale Leader*, October 21, 1881, p. 4)

Aleck Travis to work at the foot of Plane No. 1:

"Mr. Aleck Travers has accepted a situation at the foot of No. 1 under S. A. Dilts." (*Carbondale Leader*, October 13, 1882, p. 2)

The white horse that worked at the foot of Plane No. 1 as was named Tom:

“The white horse ‘Tom’ who does duty at the foot of No. 1 plane is an inveterate tobacco chewer.” (*Carbondale Leader*, October 20, 1882, p.2)

Headman at Plane No.1, Siegel Robbins, badly hurt:

“Siegel Robbins, headman at No. 1 plane, had his left foot badly smashed on Thursday afternoon. He was boarding the coal cars to put on the brake when his foot slipped between the bumpers just as the cars came together. He may be laid off some weeks.” (*Carbondale Leader*, November 10, 1882, p. 2)

John Milligan hurt at the head of Plane No. 1:

1882: “John Milligan jr. employed at the head of No. 1 plane had the fleshy part of his arm badly crushed on Tuesday while coupling cars.” (*Carbondale Leader*, November 17, 1882, p. 2)

Frank Campbell worked on Plane No.1 for 54 years:

1883: “Frank Campbell, who has been employed at No. 1 ever since the road started [for 54 years], has accepted a position as barn boss at Powderly’s.” (“GRAVITY NOTES,” *Carbondale Leader*, April 20, 1883, p. 3)

New boilers at Plane No.1:

“There will be three new boilers put in at No. 1 this week.” (*Carbondale Leader*, June 29, 1883, p. 3)

Valuable cow killed on Plane No.1:

“Mr. Edgar Smith had a very valuable cow killed by the cars on No. 1 plane, on Monday last.” (*Carbondale Leader*, July 13, 1883, p. 2)

A fence will be built along Plane No. 1:

“The D. & H. are about to build a fence long No. 1 plane.” (*Carbondale Leader*, August 21, 1883, p. 2)

Harry Dimock will now work for E. E. Hendrick:

“Harry Dimock, who has been night watchman at No. 1 engine on the gravity road for over fifteen years, leaves his position after to night to accept a position as night watchman for E. E. Hendrick at his oil works in this city.” (*Carbondale Leader*, August 31, 1883, p. 2)

Runaway on Plane No. 1:

1883: "A runaway occurred on No. 1 plane on Wednesday. The steam was shut off too quick and the cars unhooked, running down the plane to be thrown off the track by a trap. The wreck was soon cleared away and only a short delay occasioned. An accident on the gravity road is an unusual affair to what it was before they had arrived at their present good working order. Some years ago a smash-up was almost a daily occurrence but now it is seldom we have one." (*Carbondale Leader*, September 7, 1883, p. 3)

The large bay horse that works at the foot of Plane No. 12 is named Charlie:

1883: "Charlie, the large bay horse belonging to the company, and doing service at No. 1 foot, fell on Tuesday, and had one of his eyes gouged out by a piece of iron rail. Charlie is laid up for repairs." (*Carbondale Leader*, October 20, 1883, p. 2)

Indicators placed on the engines on Planes No. 1 and 8:

1884 "Mr. Pierce Butler has placed indicators on engines 1 and 8 which work to perfection. The engineer can now tell exactly where the trip is from the time it leaves the foot until it is over the angle at the head, making it as safe to run at night as through the day." (*Carbondale Leader*, February 8, 1884, p. 2)

Broken tail rope delays train for Honesdale:

"By the breaking of the tail rope on No. 1 Gravity Plane yesterday morning the 9:40 a.m. passenger train to Honesdale was delayed about twenty minutes. A trip of loaded cars was about half-way up the plane when the rope broke, but they were safely hauled to the top of the plane without damage. The running of coal was delayed about an hour." (*The Journal*, November 17, 1887, p. 3)

Rope broke on Plane No. 1:

"The rope on No. 1 plane broke about noon yesterday while a trip of loaded cars was being hauled up. The cars ran back and came in collision with the long line of loaded cars at the foot. Three cars were badly wrecked and the coal scattered profusely into the shive pit and generally around the foot." (*The Journal*, December 22, 1887, p. 3)

Broken cable on Plane No. 1 causes bad accident:

1891: "There was an exciting moment or two at the foot of No. 1 plane on the Gravity road yesterday and a narrow escape of some of the workers on the tracks at that point from serious or fatal injury. A 'trip' of seven empty cars was being lowered from the head of the plane on the

light track on the left and when they had been run about two-thirds of the way down the cable broke and let the train down with a rush. The cars gathered momentum in a remarkably short space of time and almost before anyone knew it whisked by the men at the foot like a whirlwind. One or two of the men saw it in time, however, to shout to the others, and no one was hurt. The runaway train crashed into another train standing on a switch near the cripple repair shop, demolishing two cars and slightly damaging several others. The force of the collision was so great that the track was slightly wrenched out of true and the heavy plank walk at one side was shattered. The wreck was promptly cleared up by a large force of men and traffic was not delayed long. . . . ” (*Carbondale Leader*, August 6, 1891, p. 4: “TWO RAILROAD COLLISIONS. / A Runaway on the Gravity and a Crash on the ‘Jeff’ ”)

Cows damage gardens on No. 1 hill:

“The parties that let their cows roam at large on No. 1 hill every night had better take the bell off in the evening when they milk so that people will think their gardens safe, whether they are or not. It is too bad when people will work hard all summer in a garden and then have it all destroyed in one night as Charles McMullen’s was a few nights ago, but Charles is on the watch and so are the boys.” (*Carbondale Leader*, September 1, 1892, p. 2)

Two injuries on the Gravity road:

1898: “**TWO BAD ACCIDENTS. / W. J. Myers and Mrs. George Miller [see Plane 20 below] Injured—Both Occurred on the Gravity Road.** / William J. Myers of Sand street, who drives Louis Brauer’s bakery wagon received severe injuries this morning and came very near losing his life. The accident occurred at 7:30 this morning at the foot of No. 1 plane. Myers had jumped on to a trip of cars that were coming over on the side track just north of the one used for regular traffic. / He was standing on the right bumper of the second car with an arm thrown over the top and when the trip reached the foot was seen by Verne Tuttle, one of the runners, to slip down to the ground below. There was a trip of cars on the main track which is several feet below the other and Myers struck against a bolt projecting from one of the cars and was rendered unconscious. / The loaded cars had already been hooked on to the rope by Charles Gilmartin and in another moment would have been in motion but Mr. Tuttle realizing Myers’ danger shouted to a man standing near the signal rope and the power was turned off just in time. / The space between the rail and the wall is very narrow and the unconscious man was lying in such a position that he would inevitably have been badly mangled if not killed if the cars had been set in motion. / He was carried to S.A. Dilts’ office and from there put in the ambulance which took

him to the hospital. His injuries consist of a deep gash in the cheek, a badly bruised shoulder and a wrenched ankle, in addition to the shock from falling. / Mr. Myers is a leading member of the Mitchell hose company and is widely known throughout the city. His many friends will hope to see him about again soon. / A brother of Mr. Myers is still laid up from injuries received while employed at his work as fireman for the electric light company.” (*Carbondale Leader*, January 5, 1898, p. 5).

Gravity Employees Support Spanish-American War:

“A FLAG AT NO. ONE HEAD / Raised by Patriotic Gravity Boys / The gravity boys at No. 1 head have displayed their patriotism in honor of Uncle Sam by erecting a flag pole and floating a new flag. The pole which is a fine one about forty-five feet long is erected in the head house. The flag’s dimensions are 12 by 8 feet. The flag was raised on Friday last and the ceremony was witnessed by a large number of patriotic people on the hill. The boys have been receiving congratulations from all for their patriotic move.” (*Carbondale Leader*, June 28, 1898, p. 6)

6808

Plane No. 2

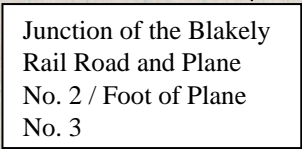
--Plane was 1,435 feet long (rise 105.95 feet)

--Level 2: 238 feet long (fall 1.51 feet)

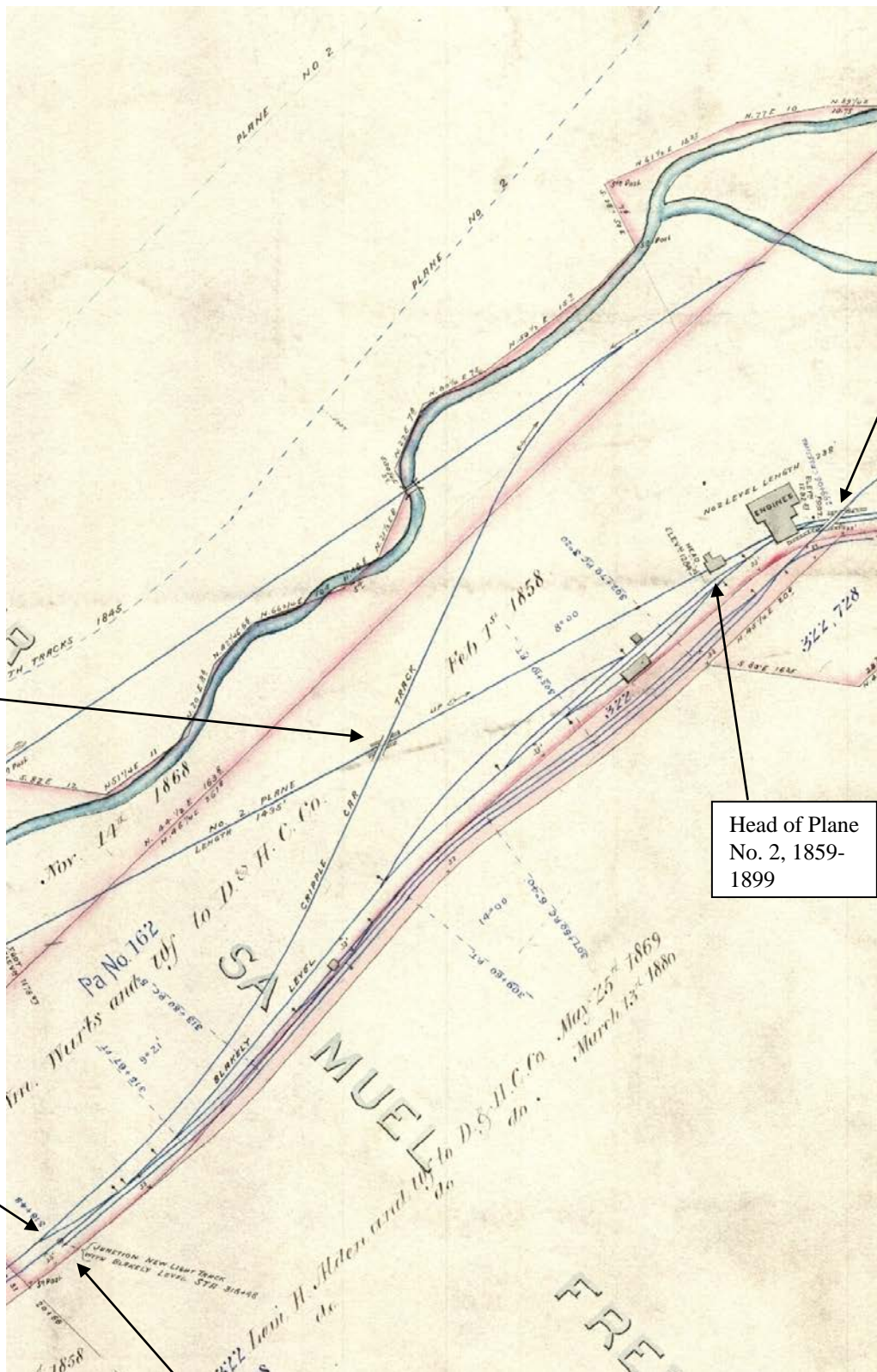
The engineers at the head of the plane:

“At No. 2, the engineers were in the following order: Thomas Pillow, James Johnson, brother of Mrs. Davis on River street, Patrick Archbald, Perry R. Farrer and James Campbell, who had been in service there from 1858 to 1897, when he resigned and John Bate was appointed in his place.” (*Joslin/Davies*)

There was a connection between Plane No. 2 and the Blakely Level/Railroad (which was extended north from the site of the Blakely engine (in the Lincoln Avenue area) to connect with Plane 2. That connection is shown on the following map, p. 11, from *D&H Deeds Luzerne I*. This map illustrates the deed, pp. 1-6, dated July 28, 1825, between John Wurtz & others, Trustees, and The Delaware & Hudson Canal Company.



163



Bridge over
Plane No. 2
for Cripple
Car Track

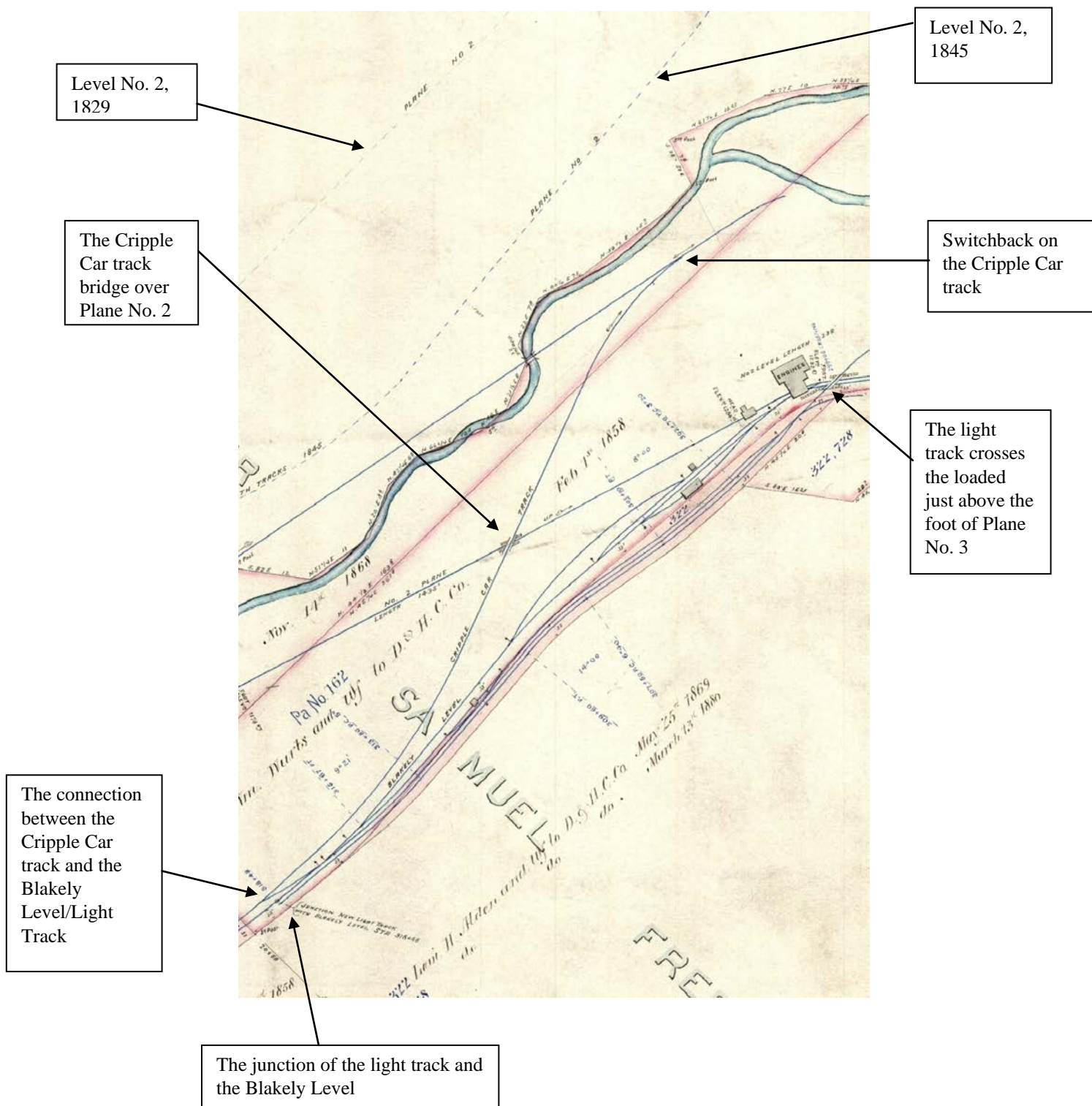
Light Track
crossing
Loaded Track
just above foot
of No. 3

Head of Plane
No. 2, 1859-
1899

Connection of
the Cripple
Car track and
the Blakely
level/light
track

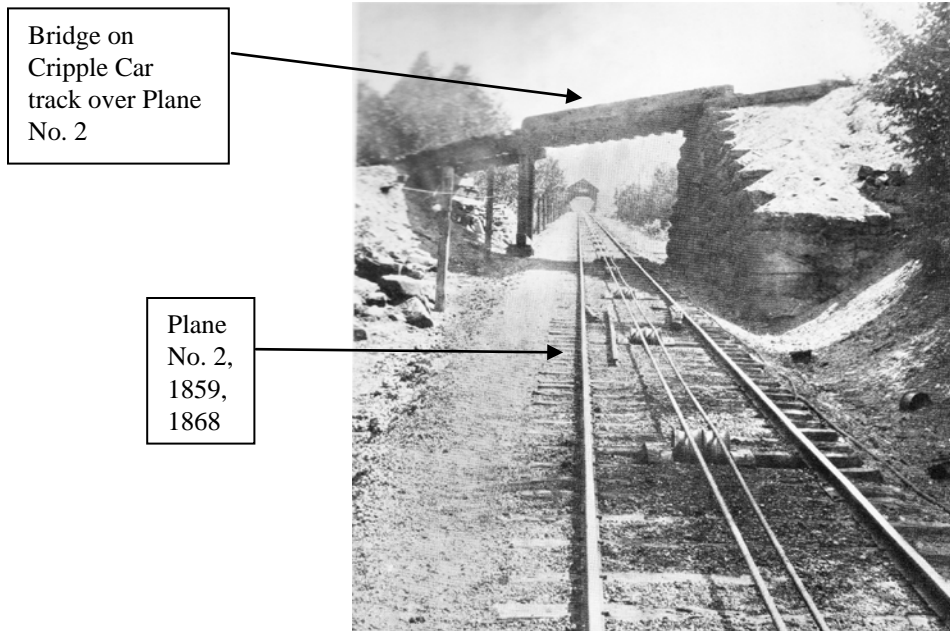
"Junction New Light Track
with Blakely Level"

At Plane No. 2, car inspectors were stationed. Those inspectors carefully examined for defects all cars returning from Honesdale. Any cars with defects, called “cripples, were switched out and dropped down the planes to the Car Shop for repairs. The connection of the Cripple Car track and the Blakely Level is shown on the map detail given above. The Cripple Car track and its switchback are shown in full on the map detail given below.



The Cripple Car track crossed, on a descending grade, inclined Plane No. 2 (in the middle). That crossing point is shown on the map given immediately above and in the photograph given below. Cars moving on the Cripple track would have moved from right to left in this photo.

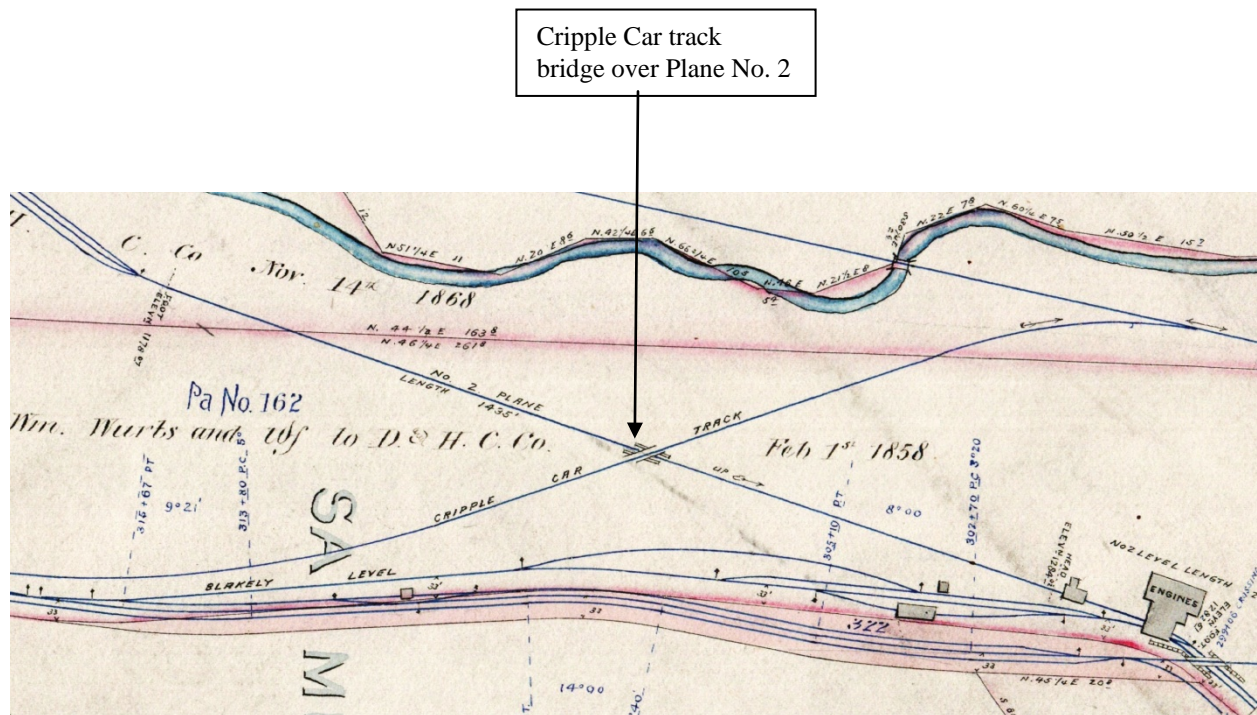
Here is the photograph of Plane No. 2 from *Shaughnessy* (p. 50):



Here is a view looking down Plane No. 2, with the Cripple Car bridge over the plane. The cripple car track descends from left to right in this photograph, the original of which is in the archives of the Pike County Historical Society, Milford, PA.



In all the standard Gravity Railroad histories, we read that the light track (coming down from Shepherd's Crook and White's Crossing) crossed the loaded track in the middle of Plane No. 2. Not so. Let's have a look at the always-reliable 1895 Gravity Railroad map that was produced by the D&H. In the first of the details shown below from that map, we see the Cripple Car track crossing the middle of Plane No. 2.



In the second detail, we see the head of Plane No. 2, the Engine House there, and Level No. 2, as well as the foot of Plane No. 3. Note that the light track, coming down from Shepherd's Crook and White's Crossing, crossed the loaded track just above the foot of No. 3 (not in the middle of Plane No. 2, as numerous Gravity Railroad publications state):

Shaughnessy, p. 50, correctly identifies this plane as No. 2, but incorrectly identifies the track on the bridge above the plane as being “the light car tracks toward the mines.” *Shaughnessy*’s source for the photo is the G. M. Best collection. The track on the bridge is the Cripple Car Track. Osterberg (p. 22) is way off target when he calls this Plane No. 1, which it clearly is not.

6809

Cripple Car Notations and Details

--light car inspection area in Plane 2 area

James Farrell worked as a car repairman at Plane No. 2:

“In 1869 the age of 14, James was transferred to the Transportation Department of the gravity railroad as a car repairman at plane number two, on the unloaded car track, where all cars operating between Honesdale and Carbondale were inspected on each trip and repaired if necessary.” (Biographical sketch of James A. Farrell—“The Engineer Hired a Horse”—in the July 1, 1932 issue (pp. 195-96, 203) of *The Delaware and Hudson Railroad Corporation Bulletin*)

Plane No. 1 in 1866 remained double tracked: the north plane being the cripple car track back to the Cripple Repair Shop at the foot of Plane No. 1. The south plane on No. 1 remained the loaded car track. Note that the cripple car track was double tracked before its descent down the cripple car plane.

Seven cars on the cripple car plane crash at the foot of Plane No. 1:

“There was an exciting moment or two at the foot of No. 1 plane on the Gravity road yesterday and a narrow escape of some of the workers on the tracks at that point from serious or fatal injury. A ‘trip’ of seven empty cars was being lowered from the head of the plane on the light track on the left [Cripple Car track] and when they had been run about two-thirds of the way down the cable broke and let the train down with a rush. The cars gathered momentum in a remarkably short space of time and almost before anyone knew it whisked by the men at the foot like a whirlwind. One or two of the men saw it in time, however, to shout to the others, and no one was hurt. The runaway train crashed into another train standing on a switch near the cripple repair shop, [Emphasis added] demolishing two cars and slightly damaging several others. The force of the collision was so great that the track was slightly wrenched out of true and the heavy plank walk at one side was shattered. The wreck was promptly cleared up by a large force of men and traffic was not delayed long. . . ” (*Carbondale Leader*, August 6, 1891, p. 4: “TWO RAILROAD COLLISIONS. / A Runaway on the Gravity and a Crash on the ‘Jeff’ ”)

Accidents, Facts about the Plane, and Daily Life

Richard Turner killed doing a good deed:

1869: "Fatal Accident. / A sad accident occurred at No. 2 on the Railroad above town on Tuesday. / Richard Turner, a son of widow Cynthia Turner, employed at the Foot of the Plane, perceiving that another person had made a mistake in attaching the sling, rode up the Plane to endeavor to correct it and prevent damage. In doing so, he was drawn under the cars and received injuries which proved fatal. He died after a few hours. / This is the second son, Widow Turner has lost upon the Railroad—both in the conscientious discharge of their duties." (*Carbondale Advance*, January 16, 1869, p. 3)

Breakdown of machinery at Plane No. 2 causes delay in shipping coal:

"A break of the machinery at No. 2 plain [sic] occurred on Friday of last week, which delayed the transportation of coal over the D. & H. C. Co.'s (gravity) railroad until Saturday evening. The machinery had been in use during the past eight or nine years, and was rusted so tight that it was impossible to remove the keys from that portion which could be used again, which had to be replaced by new wheels, shaft, etc." (*Carbondale Leader*, August 3, 1872, p. 3)

Mrs. McLaughlin killed by a lumber car:

"On Tuesday afternoon an accident happened on the loaded track of the D. & H. R. R., near our borough [borough? Carbondale?], which resulted in the death of the wife of Patrick McLaughlin, a laborer employed on the road and living near plane No. 2. The unfortunate woman was picking coal on the track, in company with a girl. As the freight train approached they stepped aside to let it pass. Close on the upper side of the track a species of dock is built, from which stone is loaded upon cars, while the lower side is open. The girl left the track on the latter side, but Mrs. McLaughlin stepped off on the upper side, and stood against the dock. The first two cars of the train were box cars, and passed her. The third was a lumber car, of greater width, the platform of which extended so far laterally as to fill almost the entire space between the track and the dock. When this car reached the spot where the woman stood, unable to escape, the projecting bolder struck her. She fell under the wheels, was instantly run over, and so badly mangled that she lived only about ten minutes, without speaking, after she was taken out. No blame can attach to the conductor of the train. The brakes were applied as soon as the dangerous position of the woman was discovered, but it was impossible to stop the train in time to prevent the catastrophe.—*Citizen*" (*Carbondale Leader*, April 12, 1873, p. 3)

Erring husband caught with another woman by his wife:

“An Erring Husband. / A sensation was made about the neighborhood of No. 2 on the Gravity road on Sunday by an erring husband and an outraged wife. The man who is employed on the railroad not many miles from No. 2 plane arranged to send his wife home to visit her parents over Sunday, some few miles from there, and assisted the then unsuspecting woman to get off, telling her that he would follow in the evening. She obediently carried out his instructions, but when night came the designing man did not follow as he promised. Sunday morning came, and Sunday noon, and yet he did not turn up, and the young woman began to suspect something was wrong. She put on her things and walked home to find her faithless spouse not there, but she did succeed in routing him out of a neighboring house where he had spent the time since he bade adieu to his trusting wife, in the company of a fascinating woman, to whom he had been paying attentions on the sly for some time. His story that he had been suddenly taken sick just after his wife left him was not credited, and his excitable actions on being discovered in his perfidy proved him to be a pretty well man at that time. His wife will stay home and take care of him over Sunday hereafter.” (*Carbondale Leader*, May 24, 1887, p. 4)

New ties installed in Planes Nos. 1 and 2:

“Foreman Inch and Lippart’s gangs of workmen have lately been engaged in putting in new ties on No. 1 and 2 planes, and other points on the Gravity road, and reballasting the same.” (*The Journal*, October 13, 1887, p. 3)

6810

Plane No. 3

--1,310 feet long (rise 115.53 feet)

--Level: 556 feet long (fall 5.28 feet)

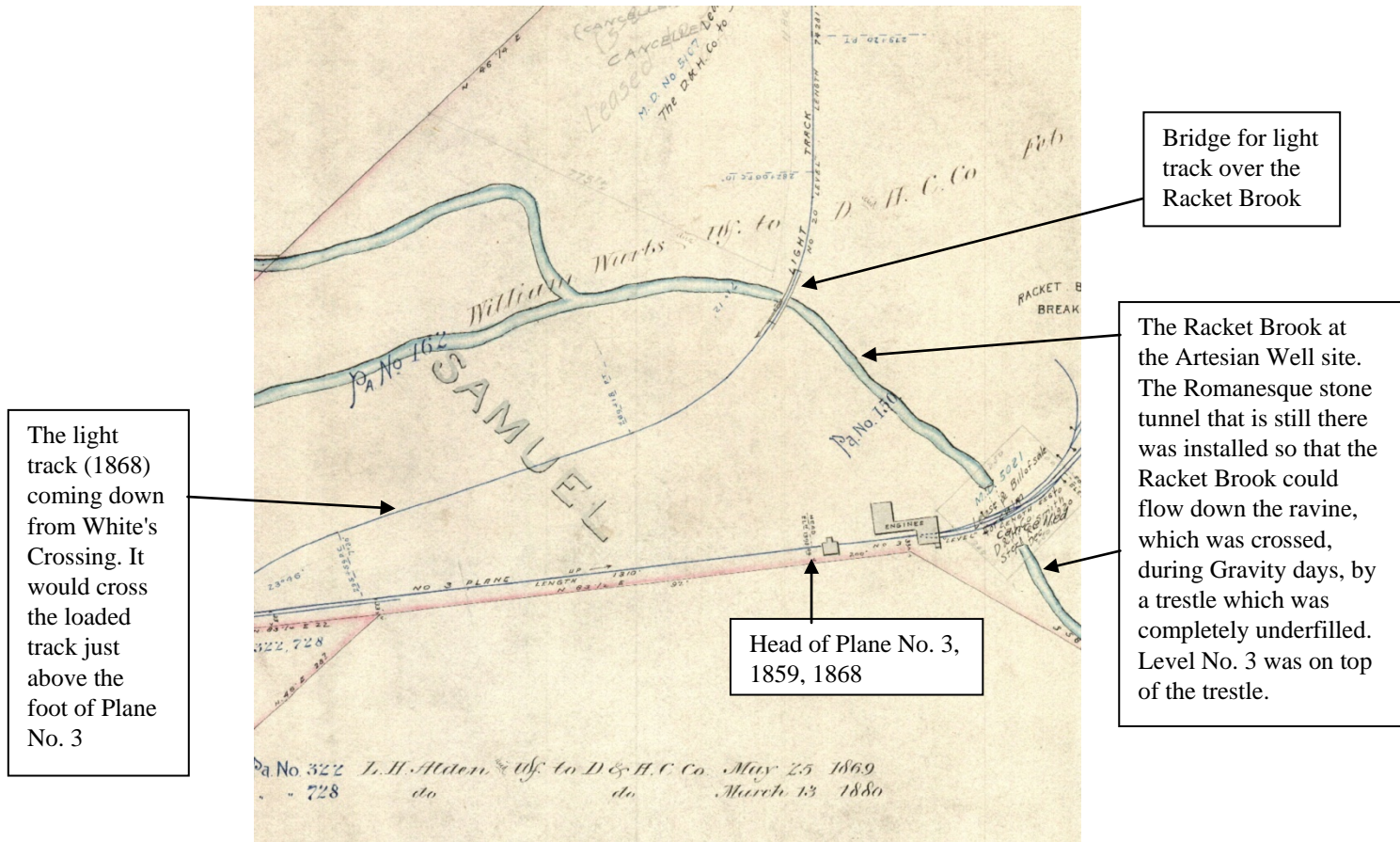
Engineers at the head of Plane No. 3:

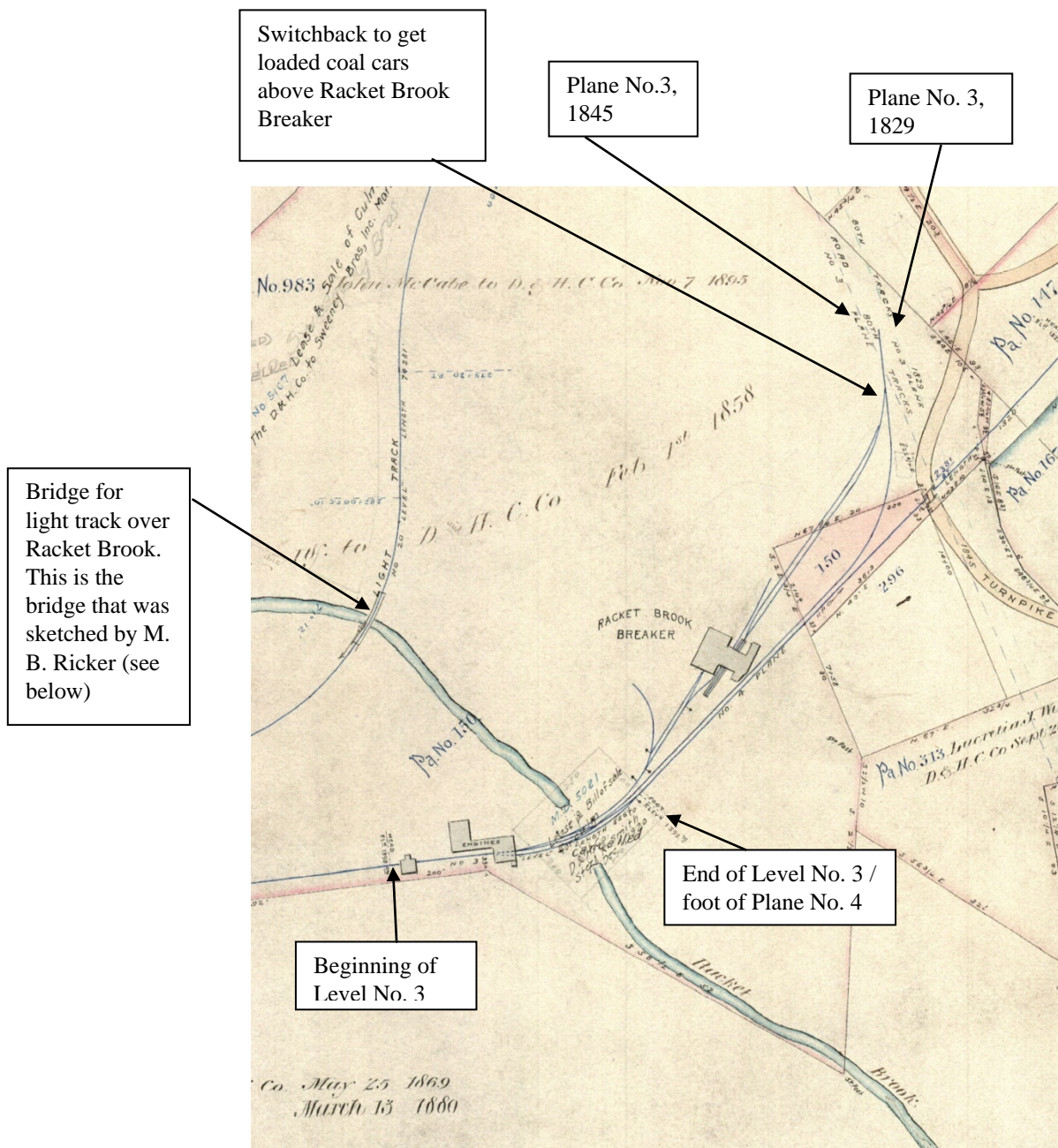
Plane 3: "No. 3 was manned first by Benjamin Franklin, followed in order by Edward Davis, John C. Davis, E. Y. Davis, Antoine Delafontaine. E. Y. Davis was transferred to No.28. P. J. Foster succeeded Delafontaine, transferred from No. 7. E. Y. Davis said there were two engineers of the name of John C. Davis, and for that reason his father omitted the C. in his name, yet in the records one not knowing where they were stationed can tell which one was meant in speaking of them." (*Joslin/Davies*)

More about John C. Davis:

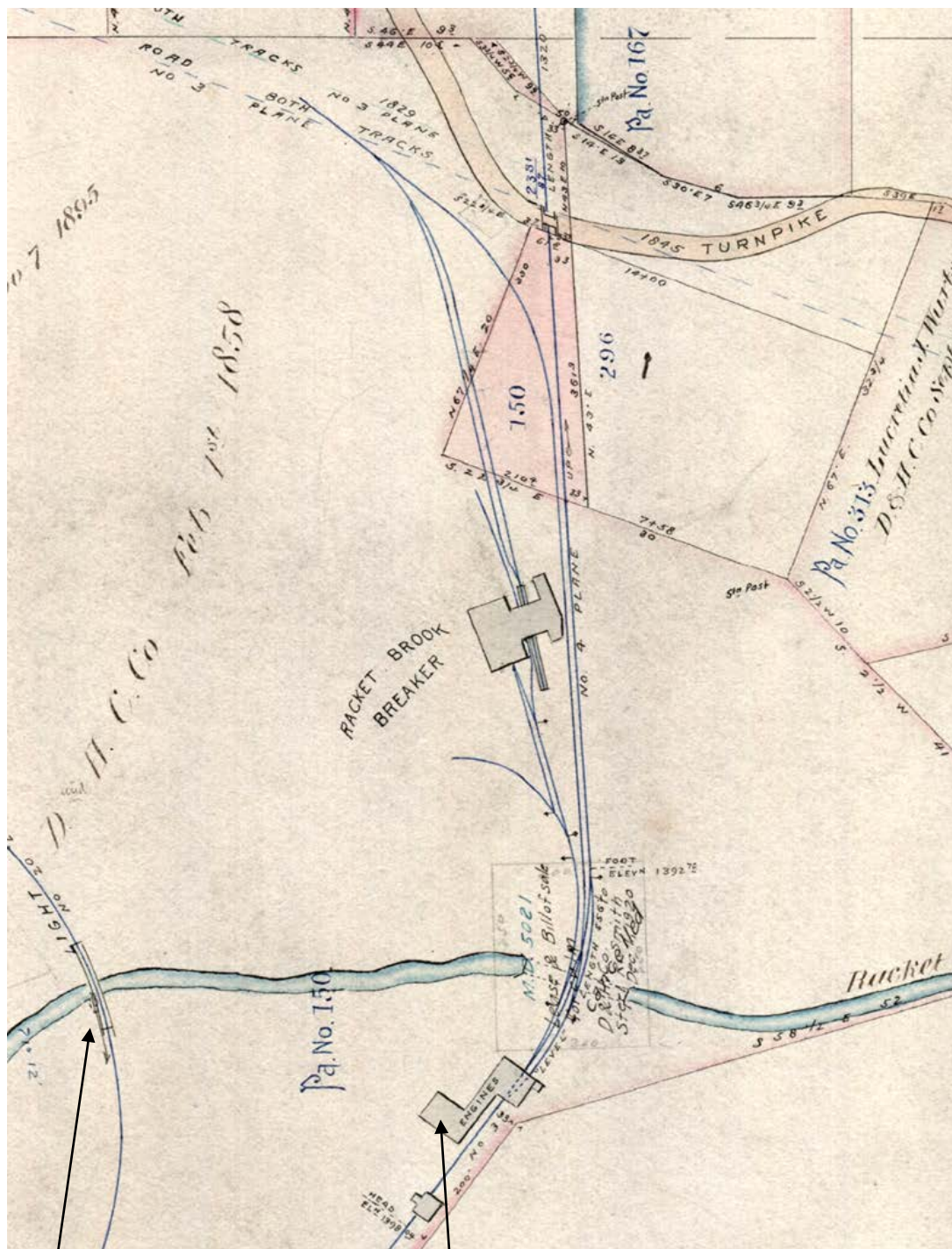
"JOHN C. DAVIS was born in Carbondale; married Ida Van Rants, of New York city, in 1845; began work for the Delaware and Hudson Canal Company in 1850; went to New York in 1857; returned and re-engaged with the Delaware and Hudson Canal Company in 1863 and is engineer at 'No. 4.' He was in the United States army from October 28th, 1864, to the close of the war. He is a member of the school board of Carbondale township." (*1880*, p. 452C)

1895 Gravity Railroad map: No. 3 Engines and Plane (three views)





Here is a closer look at the map detail given immediately above:

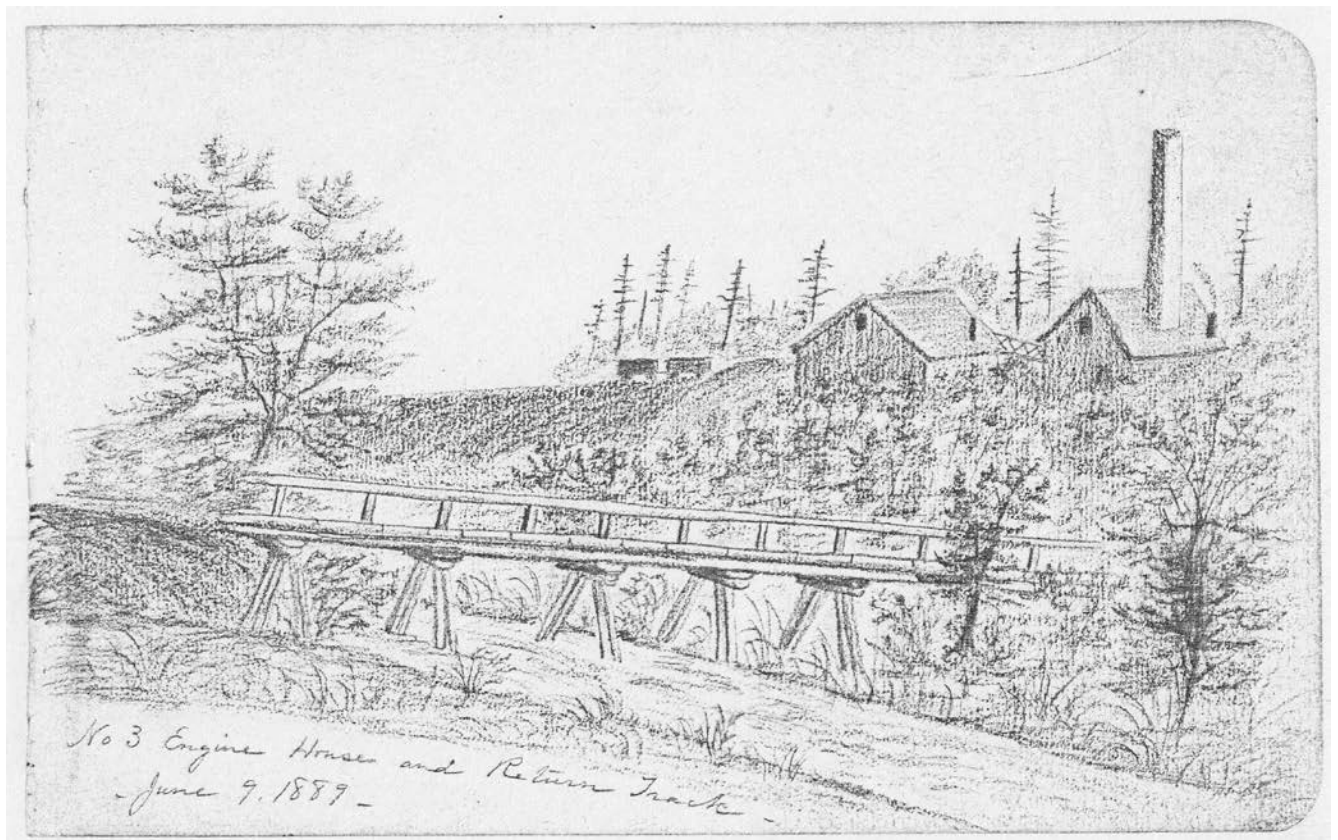


This is the bridge that was sketched by M. B. Ricker (see below).

This is the engine house that was sketched by M.B. Ricker (see below)

Shown below is "No. 3 Engine House and Return Track – June 9, 1889" from the M. B. Ricker sketch book titled "Carbondale Sketches – Summer of 1889 M. B. Ricker," in the collection of the Russell Homestead, Carbondale.

The "Return Track" and the return track bridge in the foreground is the light track coming down from the White's Crossing area, and the bridge for the light across the Racket Brook. This bridge and this crossing are shown on the map details given above.



This Ricker sketch is the only known representation, in any medium, of the bridge shown in this sketch.

Hensel stereocard No. 1146: *View of Racket Brook Gap, seen from Railroad*

This view was taken on No. 3 level, which crossed the ravine at the Artesian Well site; this view is looking up the ravine. Hensel was standing near the middle of the trestle, which means that the Romanesque stone arch tunnel that is still on this site today is more or less directly below where the photographer was standing when he took this photo.



Water tunnel for Racket Brook under Level No. 3, Artesian Well site:

Level between head of No. 3 and foot of No. 4: To construct this level, the entire ravine at Racket Brook had to be filled in. In order to do so, a draining system had to be installed for the Racket Brook to flow through. Here is a photo taken by the author of that rounded arch/Romanesque stone drain, still standing, at Racket Brook/the Artesian Well site:



In many places drains had to be installed under the roadbed of the Gravity Railroad. Here is one of those drains, post and lintel construction, not far from the Artesian Well site:



Here is a view of Plane No. 3, with the light track coming down from Shepherd's Crook crossing over Plane No.3 just above the foot of the plane. This is the only known photograph of the light track bridge over Plane No. 3, just above the foot of the plane. The original of this photograph is in the collection of the Waymart Area Historical Society. Note that there are two oil pails on either side of the light track. These were used to lube the journals of the passing cars. Note that at the shed on the left, barrels of lubricating oil can be seen. Note that there is a runner (trainman) on the car that is ascending Plane No. 3.

Light track coming down
from Shepherd's Crook

Plane No. 3, 1868. With the opening of the light track through Shepherd's Crook in 1868, the second track on the uphill plane (No. 3) was no longer needed. Dorothy Hurlburt Sanderson (*The Delaware & Hudson Canalway Carrying Coals to Rondout*, 1965, p. 30) uses this photo and correctly identifies the site.



Accidents, Facts about the Plane, and Daily Life

Several accidental deaths in the Krantz family:

1. “Sad Accident. / As we go to press, a team is passing the office, conveying home the body of John Krantz, who has just been killed upon the railroad at No. 3—about two miles above town. Deceased was a son of Christian Krantz, a well known and much respected citizen here, and was about 17 years of age.” (*Carbondale Advance*, February 17, 1872, p. 3)

2. The death of George Krantz as reported by the *Carbondale Leader*:

“KILLED ON THE RAILROAD./ George Krantz Crushed to Death in the D. & H. Yard This Morning. / George Krantz, aged about twenty-two years, a brakeman on the D. & H. Co. R. R. was squeezed this morning about nine o'clock between the bumpers of a locomotive and a car. He was engaged in coupling in the railroad yard and was caught between the chest and back, the force breaking his ribs and crushing his lungs. He suffered intense agony, told by his cries, until he was taken in the company's ambulance to the home of his father, Christian Krantz, on Wyoming street, where he died before medical attendance could reach him. This is said to be Mr. Krantz's third who has lost his life as the result of an accident. / Some years ago, John was killed at the head of No. 3 plane and prior to that another brother, whose name we do not now recall, was crushed by falling timber. The father, Christian Krantz, is himself an invalid.” (*Carbondale Leader*, March 29, 1887, p. 4)

"Fatal Railroad Accident. / George Krantz, a brakeman on the Del. and Hud. railroad, while engaged in coupling cars in the D. & H. yard, about nine o'clock on Tuesday morning, received injuries from which he died in less than two hours. / In making a connection he leaned in too far, and his body was caught between the bumpers of the engine and coal car. His ribs were crushed in by the force of the concussion and penetrated his lungs. He was taken in the company's ambulance [sic] to the home of his father on Wyoming street, where he died a few minutes before 11 o'clock. / Although suffering terribly he remained conscious almost to the last. / He was in the twenty-third year of his age, his birthday occurring in January. He was a member of the Berean Baptist Sunday-school, and also of the Society of Foresters. / The funeral took place from the house this afternoon at three o'clock, and was largely attended. The services were conducted by Rev. Mr. Root, of the Berean Baptist Church. The Foresters attended in a body and rendered the burial service of the Order at the grave." (*The Journal*, March 31, 1887, p. 3)

SRP note: On August 7, 2008, Ed Rodgers (698-5349) phoned to talk about the Gravity Railroad and mentioned that he was related to the two Krantz brothers who were killed while working on the Gravity Railroad.

Track scale installed at the 'switchback' near the foot of Plane No. 3 in 1869:

This we know from the biographical portrait of Thomas Griffin Smith that was published in Volume 5, No. 1 (January 1, 1925) of *The Delaware and Hudson Company Bulletin*, pp. 3-4. Therein we read: “Prior to his trip abroad, he had become a railroad man. That is, in 1869, he had secured temporary employment in the framing department at the local gravity shops. . . . Later, with Henry Baker, he was charged with the re-weighing of the gravity coal cars. A track scale was installed at the ‘switchback,’ near the foot of No. 3 plane, light track, and there the cars to be

re-weighed were set off. To show that they had been so checked, they were marked with a spot of white paint, about an inch in diameter, on the side center stud. This was done by pressing a stencil brush and twisting it sharply upon the stud. The average weight of the cars was between five and six thousand pounds. During the following year, 1870, he ceased his relations with the Company to resume his studies." This switchback is shown on the map given on p. 170.

Robert Oakley escapes miraculously from death:

1873: "On Thursday afternoon Robert Oakley, employed on the gravity road at No. 3 level, met with an almost miraculous escape from death. He had switched off a trip of loaded coal cars, and was walking along on the track when another trip of six loaded cars came along, and, before he had time to get out of the way, knocked him down, and the whole six cars ran over him—not over his body, however, but over one of his hands and very nicely amputated two of his fingers. Bob appears to be remarkably unfortunate, and withal rather lucky also, for we are informed that this the third time within a year that he has been run over, yet, at last accounts, he was alive and doing as well as could be expected, after taking into consideration the short space of time that has elapsed since he met with his latest accident, and the unsettled condition of the weather. Bob is said to be a first-class railroad man. But he will have to be a little more careful in the future than he has been in the past, or he will not be permitted to follow his vocation much longer in this world." (*Carbondale Leader*, March 1, 1873, p.3)

Joseph N. Wilcox began working on the Gravity Railroad as a laborer:

"In June, 1873, Joseph N. Wilcox (Biographical portrait in July 1, 1928 issue, pp. 195-96, *The Delaware and Hudson Company Bulletin*) began working on the Gravity Railroad at Carbondale as a laborer. He began work under Richard Kellough, track foreman. Four months later he was transferred to a position assisting in laying the pipe from Number three on the gravity road to the reservoir which furnished the only water supply for the city of Carbondale. That job was finished in four or five weeks' time and he then went to the transfer pockets, where the coal was transferred from the small mine cars to the larger gondolas, where he worked under George Porter."

See the notice, in Volume XVIII in this series, about the death of Thomas Watkins at No. 3 breaker in 1874. For more on No. 3 Breaker, see also the notice below about Mrs. Peter McDermott from the *Carbondale Leader* of January 2, 1885.

Near catastrophe on Plane No. 3:

The account given below of a "near catastrophe" on Plane No. 3 is especially interesting in that in describing this accident in which Coe F. Young and a party of three or four ladies could easily have been seriously injured, or worse, the journalist for the *Carbondale Leader* provides a wealth of details on the operation of the planes and levels on the Gravity Railroad. For example, we learn that three strokes of the signal bell from the foot of the plane mean that the trip to be pulled up includes a director's car or a passenger car.

“SERIOUS MISTAKE OF AN ENGINEER. / Coe F. Young, Esq., of Honesdale, vice president of the D. & H. C. Co., with a party of three or four ladies was returning to Honesdale over the gravity road on Wednesday, and his car while standing at the head of No. 3 plane was run into by a trip of loaded coal cars and narrowly escaped being wrecked. / Antoine DeLafontaine, the engineer at No.3 plane, about one o’clock on Wednesday responded to the three strokes of the signal bell from the ‘foot’, which indicated that the trip to be pulled up included a director’s car or a passenger car. It was safely landed on the level at the ‘head’ and proved to be the car of the vice-president. The level is short between the head of this plane and foot of No. 4, having room for about six trips of cars. Two trips already stood on the level, and the car containing Mr. Young and party was run around the bend of the railroad at this point, and brought to a stand in the rear of the trips of coal. In the meantime the engine of No. 3, which had just been left behind was in operation drawing up its usual trip of five cars. While it was doing this a suspicious noise among the rods of the engine distracted the engineer’s attention and he endeavored to find what was out of order. The ninety seconds which a trip consumes in traveling up the quarter of a mile from the foot to the head of the plane, passed before Mr. DeLafontaine realized it, and he was horrified to look up and see the five cars coming over the head at full speed. The man stationed at the head, whose duty it was to board every trip and detach the sling which connected it with the rope, recoiled from the attempt to jump on this one and let it pass him. The effect of the failure to detach the trip when at high speed is usually to snap the rope or some of its connecting links when the point is reached where it descends to the engine house, and allow the trip to continue its course. / Mr. Young and the members of his party undoubtedly owe their lives to the bravery, presence of mind, and trained skill of John Mulligan, the foreman in charge of the level between planes 3 and 4. Noticing the failure of the headman to perform his duty, in an instant he sprang into position, successfully boarded the front of the head car while at its high speed, detached the sling, let it drop and hurried to the nearest brake. He put this down, jumped off and boarded the trip again at another brake which he also quickly brought to bear in checking the speed. The trip struck Mr. Young’s car and gave it a severe shock, which threw all the passengers from their seats against the sides of the car, but luckily the danger was passed and the fright and the jar were the most serious results of the mishap. / Mr. DeLafontaine has been relieved from duty, pending an investigation as to what blame attaches to him. Fred Spangler, an employe of the machine shop, has been at the post since. It has been remarked that had this been a ‘stick trip’—as those containing no car provided with a brake are called, since they must be stopped with sprags—the result would have been serious.” (*Carbondale Leader*, January 6, 1882, p. 4)

More on the ‘near catastrophe’ reported above:

“We have learned since our last issue that the head-man at No. 3 plane actually did board the flying trip which came so near wrecking Mr. Coe F. Young and party. As this is the case we hasten to give him the credit which under misapprehension we failed to give him last week. His name is John Smith. It appears that he is equally deserving of praise with John Mulligan, both boarding the trip at the same instant, Smith unhooking it and Mulligan putting down two brakes, climbing over the trucks in order to do it. Railroading is dangerous business, and the meager pay of the men engaged in it seems hardly sufficient to foster heroism. Yet we see, as in this case, men ready to risk their lives to save the property and the lives of their employers.” (*Carbondale Leader*, January 13, 1882, p. 4)

Messrs. Bateman, Mulligan, and Smith saved the lives of Coe F. Young and four ladies of his family and friends:

“Narrow Escape. / The very narrow escape which occurred at the Head of No. 3 on Tuesday, Jan. 3d, at about 2 o’clock p. m., should induce great carefulness on the part of *employes*. Three of them were so in this case, and prevented the danger that threatened, and the catastrophe that might have been fatal. The engineer, it is said, neglected to shut off the steam, allowing the car, with its precious freight of humanity, in charge of Walter Dimock, to come to, and pass the angle at full speed, and its being crushed and shivered seemed inevitable. But young Bateman, John Milligan and John Smith saw the terrible danger, and were equal to the emergency. The two former sprang to the brakes, and the latter to the coupler. Together they saved the lives of the passengers, who, it is said, were Coe F. Young, Esq., of Honesdale, General Manager of the D. & H. C. Co., and four ladies of his family and friends. The three watchful men that saved their lives at the risk of their own, deserve, and everywhere receive, great praise and commendation. Such men are everywhere too scarce.” (*Carbondale Advance*, January 21, 1882, p. 3)

Nine newspaper notices about Plane No. 3 in the period 1883-1892:

“No. 3 plane will be laid with new steel rails this week.” (*Carbondale Leader*, April 6, 1883, p. 3)

1883: “No. 3 and 4 planes are receiving the finishing touches this week under the supervision of Henry Lippart and Justus Cary.” (“GRAVITY NOTES, *Carbondale Leader*, May 11, 1883, p. 3)

“Doc Avery has this week joined the Mulligan Guards at No. 3.” (*Carbondale Leader*, June 1, 1883, p. 3)

“Isaac Wedeman, No. 2 fireman, removed from Carbondale to the fireman’s house opposite No. 3, on the Honesdale road last Monday.” (*Carbondale Leader*, October 12, 1883, p. 2.)

“A large gang of men have been at work under the Culm bank at No. 3 for the past two weeks repairing the water pipe.” (*Carbondale Leader*, April 18, 1884, p. 3)

“P. J. Foster has some fine tomato plants growing in his engine room at No. 3.” (*Carbondale Leader*, April 10, 1885, p. 1)

“The thermometer registered 88 degrees in the shade at No. 3 yesterday afternoon.” (*Carbondale Leader*, April 24, 1885, p. 1)

“P. J. Foster has a young cow in his engine room at No. 3 which he is taming.” (*Carbondale Leader*, May 29, 1885, p.1)

“Burt Hunter has joined the Mulligan guards at No. 3.” (*Carbondale Leader*, September 1, 1892, p. 2)

A young person named Tom threw himself under the cars near Plane No. 3:

“About two months ago a young person who has gone by the name of Tom came around No. 3 engine and made friends with the watchman by looking out for stragglers. Will Benjamin snoozed then after coming in for a share of the latter’s supper pail but lately Benjamin began to think that Tom should provide his own supper so he refused to give him even a morsel to eat as at times he didn’t have any to spare. So Tom found that was the way he was to be paid for all his kindness and as the cold nights were coming on he grew despondent. On Thursday evening he determined to shuffle off this mortal coil, threw himself under the cars and was ground to a shapeless mass. Dr. Price gave a certificate of suicide through despondency. The rats and mice have full sway now since Tom is dead.” (*Carbondale Leader*, October 24, 1892, p. 4)

After the closing of the Gravity Railroad in 1899, No. 3 stationary engine, operated by P. J. Foster, was used to haul coal to the Racket Brook breaker.

6811

Plane No. 4

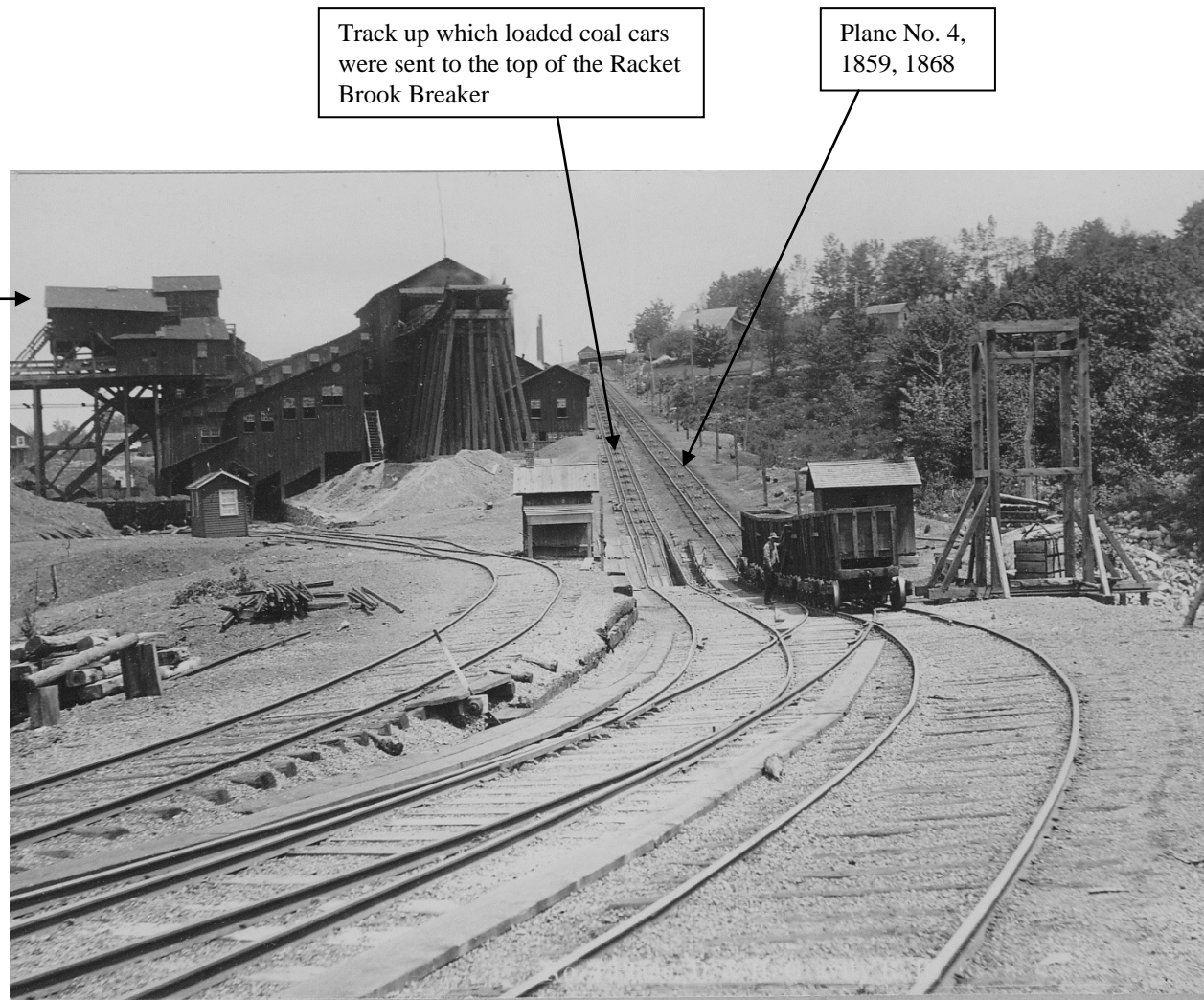
--1,320 feet long (rise 131.02 feet)

--Level 4: 239 feet long (fall 2.67 feet)

Engineers at the head of the plane:

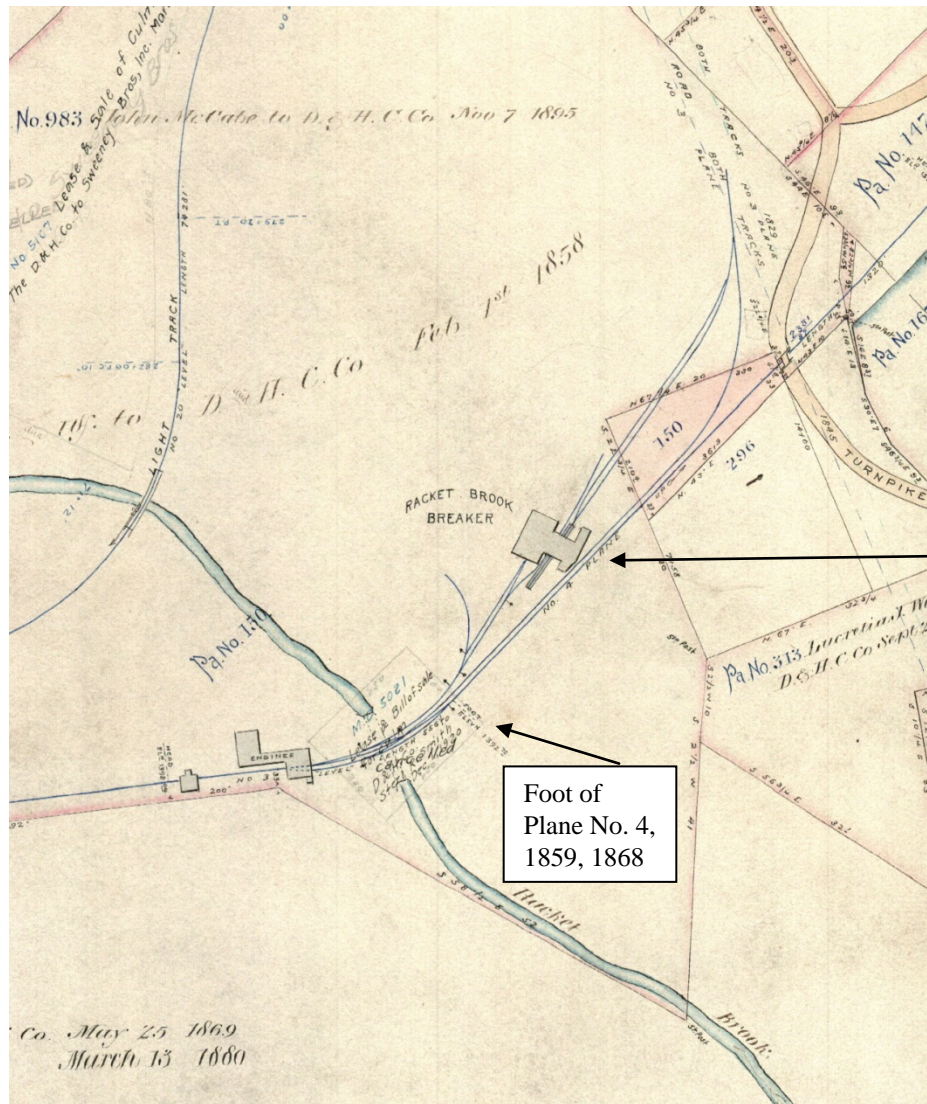
Plane 4: “No. 4, John C. Davis came from New York with others of the first engineers to put up the engines, and was given the position as engineer, followed by Peter Campbell; Patrick Archbald, Charles Ball, who was killed June 7, 1845, while working about the engine, and Patrick Grattan, who on the new road was transferred to No. 5.” (*Joslin/Davies*)

Plane No. 4 on D. & H. Gravity R. R. from *Orig. Photo Souvenir of Del. & Hud. Gravity Road*.
Published by L. Hensel, Hawley, PA.



1895 Gravity Railroad map

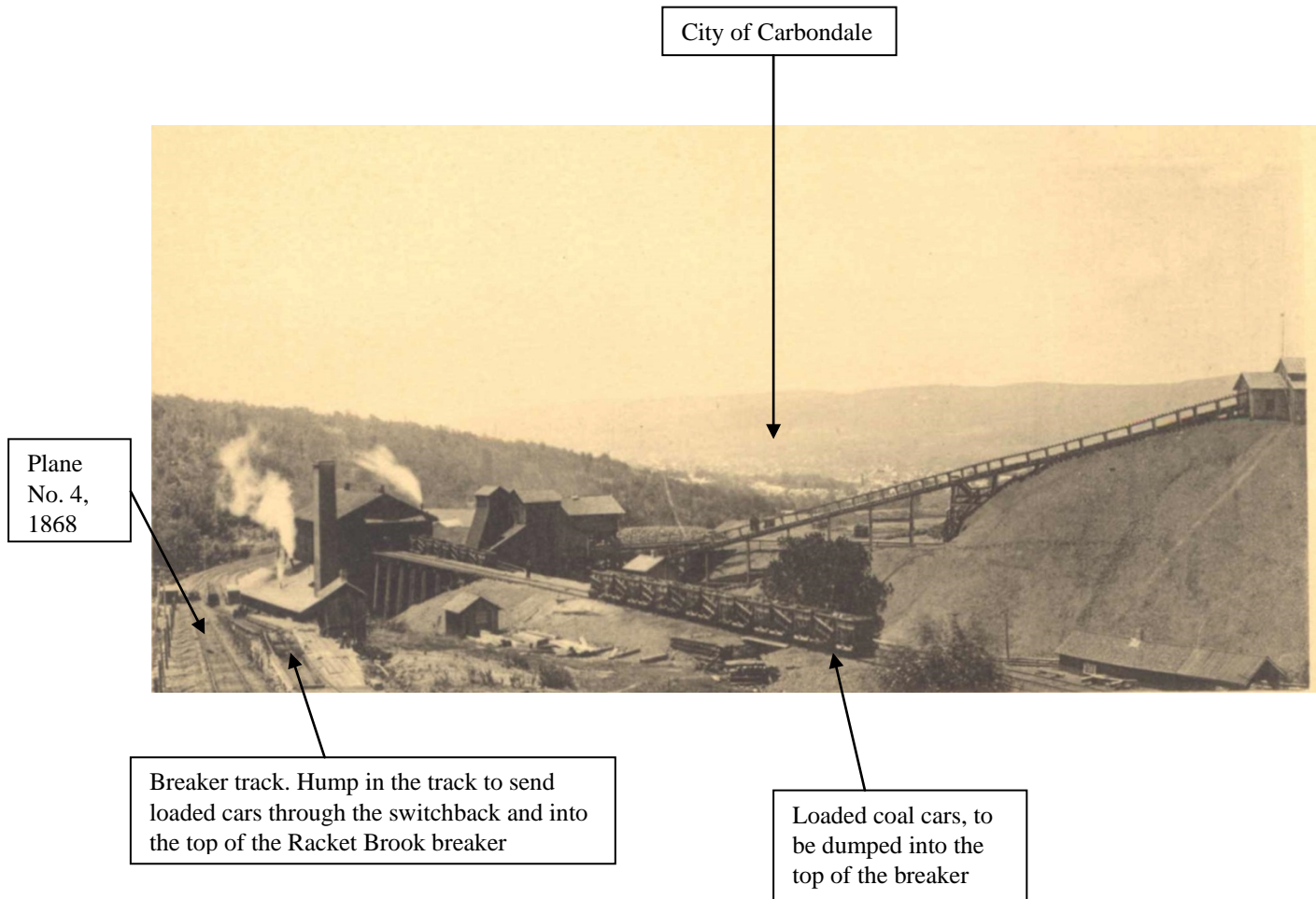
Bottom of No. 4 Plane; also Racket Brook Breaker



Racket
Brook
breaker

Foot of
Plane No. 4,
1859, 1868

Photograph *Glimpse of Carbondale, From Plane No. 4* that is included in *Souvenir of the Gravity Road / Photo-Gravures of the Old Delaware and Hudson Coal and Passenger Road, between Carbondale and Honesdale, Pa.*, published by W. B. Foster, Photographer, Carbondale, Pa. Printed by the Albertype Company, Brooklyn, New York.



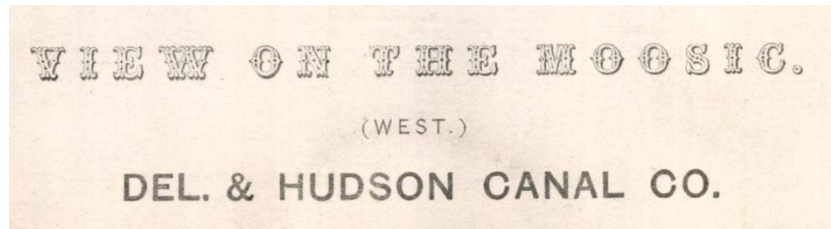
Another view taken at the head of Plane No. 4 is given on the following page. This photograph is in the archives of the Pike County Historical Society at Milford, PA.



Bell-wire on posts along side of the plane. Used for communicating messages up the plane. Three rings of the bell meant (so we have learned from accident reports) that a director's or officer's car or a passenger car was ready to be pulled up a plane. It does not appear that the D&H ever put into print a text called, possibly, "Rings of the bell on Gravity planes" (or something similar to that), but, based on modern railway usage, it seems likely that one ring of the bell on a Gravity plane meant move the cars in one direction; two rings of the bell, meant move the cars in the other direction.

Photograph in the collection of the Wayne County Historical Society by Johnson, Scranton, PA, 1860.

This photograph was taken above the Racket Brook breaker, looking West.

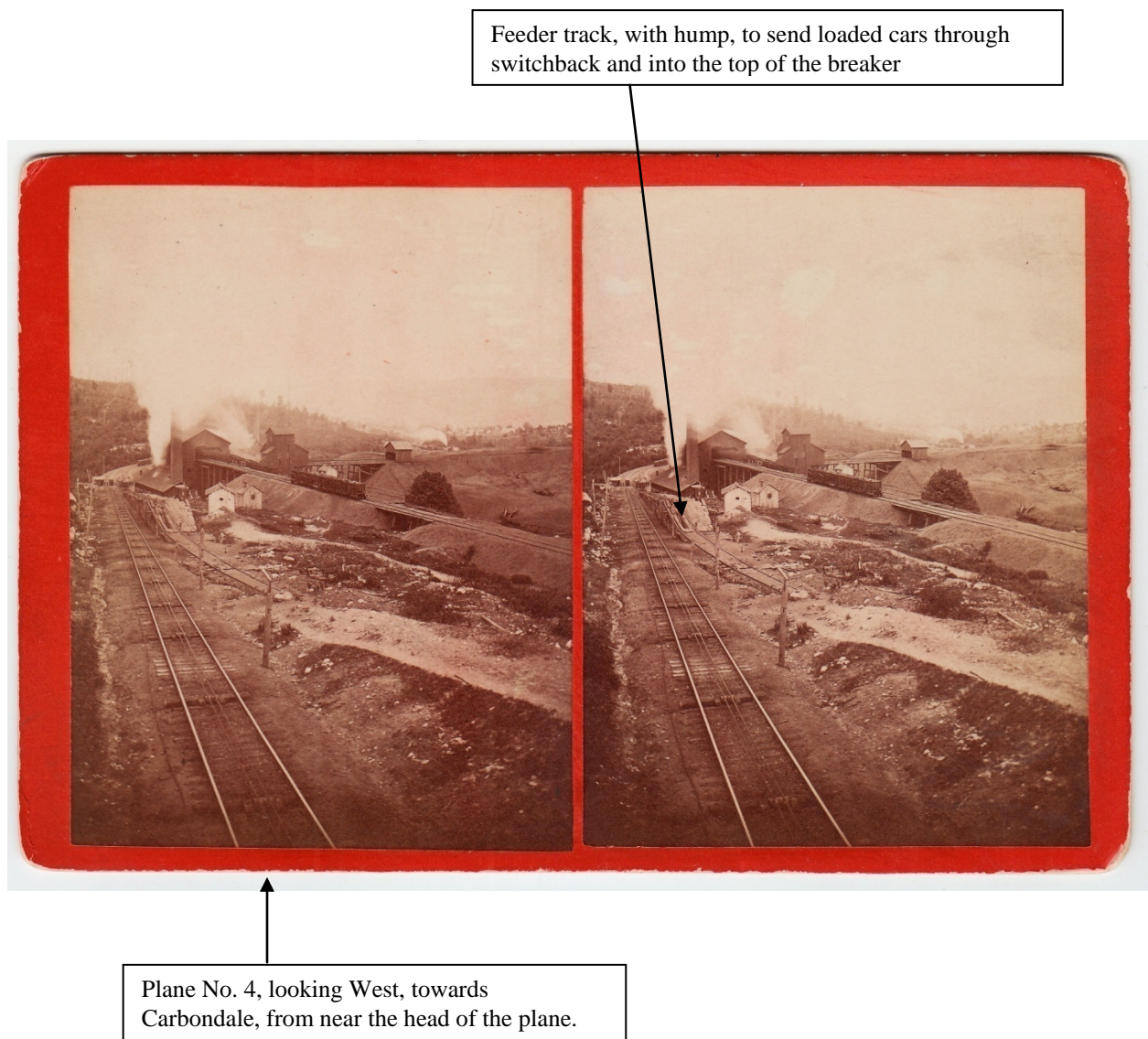


City of Carbondale

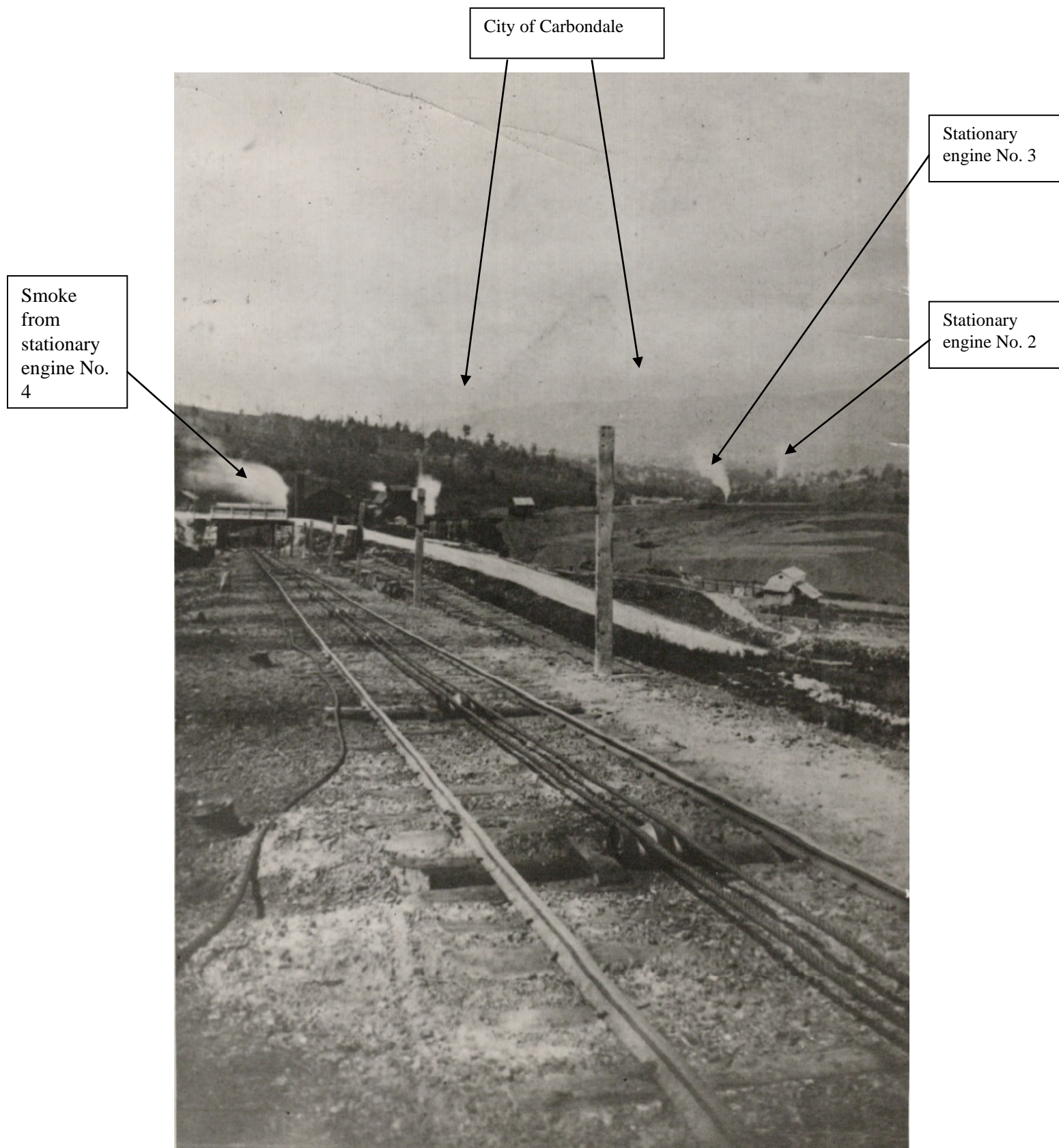


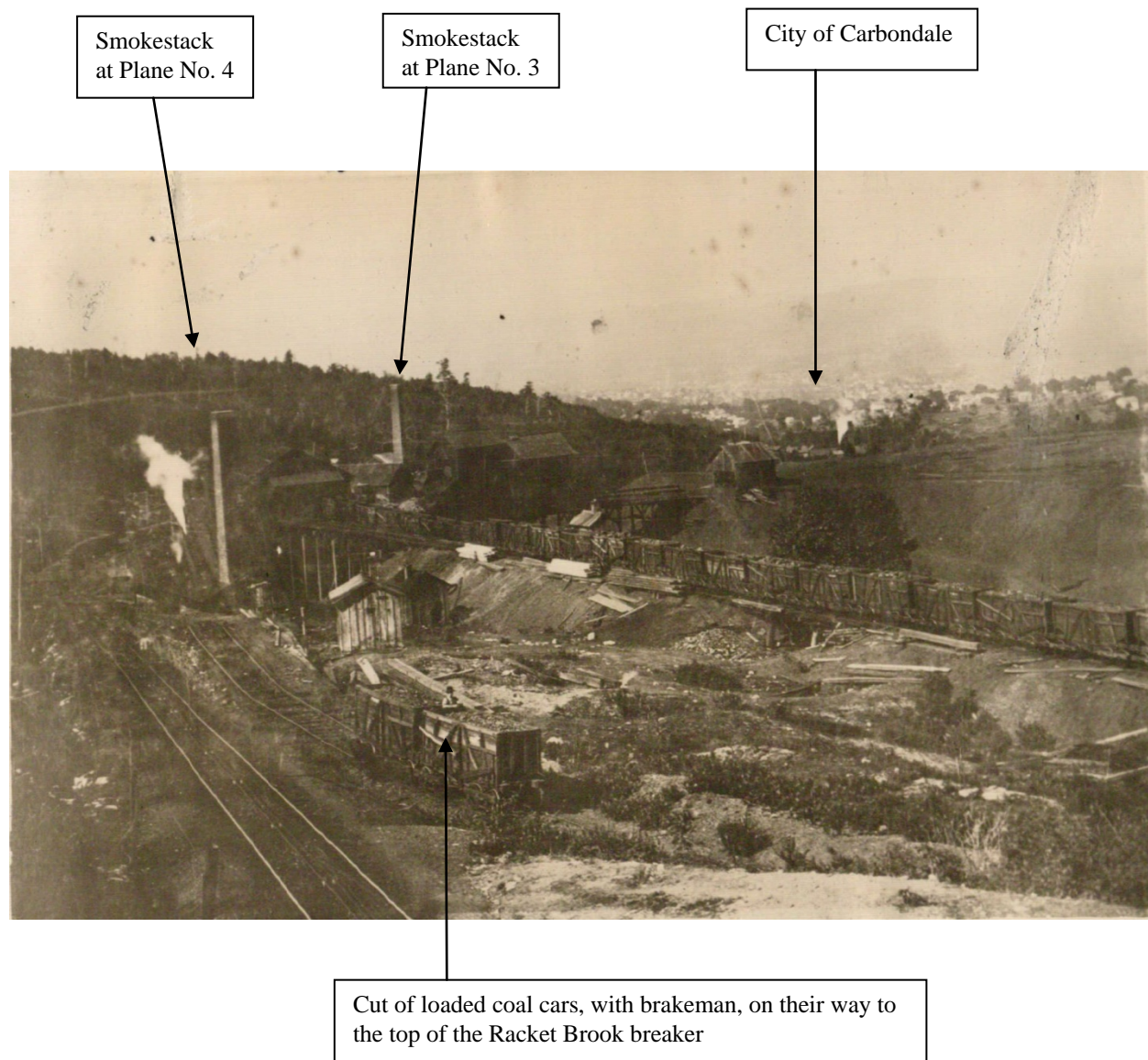
Feeder
track for
loaded
coal cars
to the
top of
the
breaker

Hensel stereocard No. 1148: *View of Carbondale, seen from Plane No. 4*



Two views taken at the head of Plane No. 4, with Carbondale in the valley in the background. These photographs are in the archives of the Pike County Historical Society, Milford, PA.





Accidents, Facts about the Plane, and Daily Life

Fatal accident at foot of No. 4 Plane in 1868:

"**Fatal Accident.** / A respectable citizen of our town, by the name Madley, was killed instantly at the Foot of No. 4 Plane upon the railroad, yesterday. He was about to hitch the train to the endless rope, when

a train came up in the rear, and bumping against the cars he was about to connect to the rope, they were suddenly thrown against him, knocking him down across the rail, and the truck passed over him, producing fatal injuries, and death almost instantaneously. / He was a widower, aged about fifty, and leaves three children." (*Carbondale Advance*, Saturday, May 9, 1868, p. 3)

Roger Sheehy killed at No. 4 on his way home from his brother's funeral:

"Fatal Accident. / The *Wayne Co. Herald* of this week says: / On Saturday last Mr. Roger Sheehy, a boatman, availed himself of the opportunity afforded by the Del. & Hud. R. R. to attend the funeral of a brother at No. 4. Desiring to return, he attempted to jump upon the cars while they were in motion, missed his footing, fell under the wheels, and was killed." (*Carbondale Advance*, September 26, 1868, p. 3)

Runaway on Plane No. 4 in 1872:

"Tuesday afternoon while a train of five cars were being hauled up plane No. 4, when about two-thirds of the distance had been made, a 'runaway' occurred, smashing and piling the cars up in an accidental manner." (*Carbondale Leader*, August 3, 1872, p. 3)

Man lost in the Woods on the Moosic Mountain:

"A COLORED MAN SO TERRIBLY FRIGHTENED THAT HE ROAMS EIGHT DAYS IN THE WOODS WITHOUT FOOD—HIS SUDDEN APPEARANCE, AND THE STORY HE TELLS.— There came to a house near the head of No. 4 plane of the gravity road on Wednesday of this week, a colored man so completely fatigued with hunger and loss of rest that he could scarcely walk. He had been wandering in the forest and over the mountain for eight days without any food excepting what few wild berries he could find. His feet and ankles were very sore and bloody. He had no covering on his feet, and his pants were torn so badly from travelling through so many briars, that they afforded no protection to his legs. He was so terribly frightened that it was difficult for some time to obtain any information from him in respect to his wanderings and the cause of them. After he had been at the house a while and had become a little rested, he told the following story: / He said he had once been a slave and at present his home was in Washington. He had a son living at a place in Wayne County called Glass Factory. He started from Washington nearly two weeks ago to visit his son. He had in his possession when he started, a letter directing him how to make his journey to Waymart, and when he got there, to hire some one to take him to his son's. He got through his journey safely to Waymart on Tuesday of last week, and hired a man to take him as directed. Two men got in the wagon with him, and, as near as could be found out, they had reached a piece of woods, when one of them thought he would scare the colored man, and grabbed him by his collar and told him they killed all d—n niggers in this part of the country. The colored man was so dreadfully frightened at this, that he leaped from the wagon, threw off his coat and vest in which he had over forty dollars, and took to the woods, where he wandered until he made his

appearance at the place above stated. He was kindly offered food, but he had been without eating so long that he could not eat anything. He wished for a little coffee, which was given him. When he got to the house he was wild with fright, and, when any person entered the room or made a quick motion, he would start as if he feared some one was after him. The people offered to take him to his son, at which he exclaimed, 'Oh, no, massa, I never want to go through there again! I want to go back to Washington.' It is said that his son heard of his father's disappearance in the woods and had searched for him for several days. The clothes were found, but were minus the money. We tell the story as it was told to us; and, if it be true, the men who frightened the colored man, whether in fun or otherwise, deserve to be punished." (*Carbondale Leader*, September 21, 1872, p. 3)

The man found in the woods dies a week later:

"The colored man of whom we gave an account last week, died on Saturday. He had been exposed to the weather and deprived of food so long that, after he came to the house of Mr. Marshall, he gradually grew weaker, until he expired." (*Carbondale Leader*, September 28, 1872, p. 3)

"The Community at Number Four"

Accident at the head of Plane No.4:

"A man named Bailey, employed on the gravity road at the head of No. 4 plane, met with an accident on Monday. He had unhooked the trip as it arrived at the head of the plane, and was about to return, when he noticed that the hook to the car was not in the right position, and jumped in front of the car to fix it. As he did so, he stepped on the wire rope, which was running swiftly, his feet went from under him, and he fell on the track. The cars were running very slowly at the time, and, the cars did not run over him, but thrust him along on the track and bruised him considerably without breaking any bones." (*Carbondale Leader*, April 26, 1873, p. 3)

Rev. Grow to speak at the Methodist chapel on the mountain:

1876: "Rev. W. B. Grow of this city, is expected to preach in the M. E. Chapel on the mountain, on Sunday afternoon at half-past two o'clock." (*Carbondale Advance*, February 26, 1876, p. 3)

At or near many of the planes on the Gravity Railroad, distinct communities, with a highly enhanced quality of life therein, developed over the years. At No. 4, there was such a community.

In 1877, the Carbondale Musical Association presented a concert in M. E. Church in Carbondale on December 19 in aid of the Number 4 Chapel fund. The program for the concert was published in December 15, 1877 issue of the *Carbondale Advance*:

“The Concert. / A grand concert will be given by the Carbondale Musical Association, in aid of Number 4 Chapel fund, on Wednesday evening, the 19th inst., in the M. E. Church. / The following attractive programme will be presented on the occasion:

1. Chorus-----‘Beautiful are thy Towers’-----Esther.

CHORUS CLUB.

2. Solo-----‘Maid of Arcadia.’-----Sullivan.

MISS FANNIE FOWLER.

3. Quartette-----‘Down by the Deep, Sad Sea.’

MARCY, CHAPMAN, WELLS & JOHNSON

4. Solo-----‘Kathleen’

MISS HATTIE HAMPTON

5. Chorus-----‘Part of Act First.’-----Belshazzar.

CHORUS CLUB

6. Duet-----‘Hope Beyond’-----White.

MESSRS. MARCY AND EVANS.

7. Solo-----‘Oh, Dinna ye Forget.’-----Root.

MRS. A. C. HALL

8. Duet-----‘Whispering Hope’-----Hawthorne.

MISSES TRALLES AND McMILLEN

9. Descriptive Solo-----‘Wrecked and Saved’

MR. WM. D. EVANS.

10. Chorus-----‘The Voice of the Bridegroom.’-----Bel’r.

CHORUS CLUB

11. Solo & Chorus-----‘I am Waiting, Essie Dear.’

JOHNSON, ASSISTED BY EVANS, PARRY, MARCY

12. Quartette-----‘The Soldier’s Farewell’-----Kinkel.

ORCHARD, WHEELER, SMITH & MARCY

13. Solo-----‘Tis Not True.’-----Mattei.

MISS CARRIE OTTMAN.

14. Trio-----‘Father, Lead us by Thy Hand.’-----Belsh’r.

MRS. HALL, MRS. MARSHALL, AND MR. EVANS

15. Chorus-----‘We will Give Thanks.’-----Belshazzar.

CHORUS CLUB

16. Duet-----‘Speed my Bark.’

MISSES OTTMAN AND FOWLER.

17. Solo-----‘Tyrolese and his Child’-----Styriens.

MISS ELLA TRALLES

18. Quartette-----‘A Home by the River’-----White.

MISSES HAMPTON AND McMILLEN,
MESSRS. ROWLEY & WELLS

19. Trio-----‘Oh, Hear Me.’-----Banks.

MR. AND MRS. G. BURRELL, AND MR. MARCY.

20. Final Chorus-----‘Praise Ye the Lord.’-----Esther.

CHORUS CLUB

The price of tickets will be 35 cents; children under twelve years, 25 cents; reserved seats, 50 cents; and are for sale at H. B. Jadwin's and Pascoe & Scurry's; sold also by Messrs. M. E. Johnson and Pierce Butler. / There are three good reasons that ought to induce almost every one, and one or the other will no doubt induce every one that can possibly afford it, to attend this concert. First—Every one, young and old, may be sure of a treat such as they rarely have an opportunity to enjoy. Second—The encouragement of our home talent, and especially of this association, which has spent so much time to improve the musical talent of our city, and the benefit of whose labors are felt in all our social and religious gatherings; they ought to be complimented and encouraged. The third and main reason is the object for which the concert is given—to *aid in building a chapel for the mission work of the church*. A nobler object could not be presented. For this reason alone the house should be packed.” (*Carbondale Advance*, December 15, 1877, p. 3)

Grand musical celebration at No. 4:

1882: “Mr. Nicholas Flood, jr., of No. 4, has just presented his sister with a fine new organ, and it was initiated on Saturday night with appropriate ceremonies, all the musicians of the neighborhood being invited in to participate in a grand musical celebration. There was some expert dancing done, especially by the older members of the gathering. A good time generally was had.” (*Carbondale Leader*, October 20, 1882, p. 2)

Engine house at No. 4 destroyed by a fire:

“On Sunday morning last at about a quarter before seven, stationary engine No. 4 on the gravity road, of which John C. Davies is engineer, was discovered to be on fire. The building was in such a dry condition that it took but very few minutes for the flames to spread beyond control, and in twenty minutes from the time the fire broke out the building was burned to the ground. The trestle-work under the track along side of the building was burned so badly as to require new timber, and it looked as though there had arisen in a few moments an obstruction that would cause a delay in the shipment of coal for at least several days. But the superintendent was on the scene in a very short time, and before the smoke had cleared away sufficient to allow the men to see, and while the timbers were still glowing with the heat, began giving his orders to a large gang of men in such a way as to show that he did not intend to have any such delay. The telegraph line was cut and a temporary telegraph office established at No. 4 head with H. C. Butler in charge, and messages began to fly back and forth in regard to timbers, ropes, parts of machinery, &c., that were required, and all during that day and the following night a large force of men were busily employed reconstructing everything that was necessary of the frame-work of the building, drum and track, and machinists were fitting parts of the machinery that had been destroyed by the fire or bent out of shape by falling timbers, while the shops and saw-mill were going full blast manufacturing what was required. By seven o’clock on Monday morning, much to the surprise of everybody, everything was ready and John C. Davies, with his smoke-begrimed face began to hoist coal up No. 4 plane as usual. How the building caught fire is a mystery. The watchman, George Colburn, reports everything all right when he left about an hour before the fire broke out. No. 4 engine house and engine were considered among the best along the gravity, and no engineer could possibly take more pride in his surroundings than did Mr. Davies. He called his engine ‘Flora Temple,’ and it deserved the name, for it certainly did surpass everything on the line in the way of speed. She was comparatively new, being built in 1880 and pulled her first trip on the morning of Feb. 25, 1881. / Mountaineer.” (*Carbondale Leader*, November 17, 1882, p. 2)

Largest coal shipment ever in one month:

1882: “The largest shipment of coal over the gravity road in any one month, was made in November, over 400 trips a day on an average, notwithstanding the burning down of No. 4 engine house.” (*Carbondale Leader*, December 11, 1882, p. 2)

Coasting on No. 4 hill:

1883: "Any person whose scruples for breaking the Sabbath are not very strong can satisfy his desires by repairing to No. 4 hill next Sunday afternoon, where 'coasting' sleighs will be furnished him." (*Carbondale Leader*, January 19, 1883, p.2)

Sunday School at No. 4 chapel to be organized:

1883: "No. 4 chapel Sunday school will be organized next Sunday at 1:30 P.M." (*Carbondale Leader*, April 6, 1883, p.3)

Officer of the No. 4 Chapel Sunday school:

1883: "The following are the officers of No. 4 Chapel Sunday School: C. L. Stanton, supt.; John Carrell, asst. supt.; Jasper Vail, sec.; J. E. Ketchum, treas. All are most earnestly requested to attend this Sunday school and help on the good cause." ("GRAVITY NOTES," *Carbondale Leader*, April 13, 1883, p. 3)

John Haley was headman at No.4 in 1883:

1883: "John Haley, headman at No. 4, moved into William Williams' house, near the chapel, on Monday." ("GRAVITY NOTES," *Carbondale Leader*, April 13, 1883, p. 3)

Large flock of wild ducks on No. 4 pond:

"There was large flock of wild ducks on No. 4 pond this week." ("GRAVITY NOTES," *Carbondale Leader*, April 20, 1883, p. 3)

Preaching at No. 4 Chapel on the first Sunday of each month:

"Rev. L. D. Floyd preached at No. 4 chapel on Sunday last, and hereafter there will be preaching the first Sunday of each month at 2:30 P.M." ("GRAVITY NOTES," *Carbondale Leader*, May 11, 1883, p.3)

Interesting prayer meetings held at No. 4 Chapel:

"Very interesting prayer meetings are held at No. 4 Chapel on Sunday evenings. The Carbondale people are invited to come up and help us in the grand work." (*Carbondale Leader*, May 25, 1883, p. 3)

Preaching at No. 4 Chapel:

"There will be preaching at No. 4 chapel next Sunday afternoon at 2:30." (*Carbondale Leader*, June 1, 1883, p. 3)

Very good sermon at No. 4 Chapel:

“Rev. L. C. Floyd preached one of the best sermons at No. 4 chapel last Sunday, ever delivered there.” (*Carbondale Leader*, June 8, 1883, p. 3)

Rev. Floyd to preach at No. 4 Chapel:

“Rev. L. D. Floyd is expected to preach at No. 4 chapel next Sunday at 2:30 P.M. All are welcome.” (*Carbondale Leader*, June 29, 1883, p. 3)

Boys seen throwing stones at the windows of No. 4 Chapel:

“Some boys threw stones at the windows of No. 4 Chapel last week, breaking out several panes of glass. The boys were seen there throwing the stones, but for the sake of their parents no action has as yet been taken in the matter. But now to whom it may concern:—Any person who will give reliable information to C. L. Stanton or John Carrell, convicting any person of throwing stones at the Chapel, a liberal reward will be paid. Parents will take notice and warn their children not to throw stones at said Chapel, for if caught in the act, they will be dealt with to the full extent of the law.” (*Carbondale Leader*, July 27, 1883, p. 2)

Preaching at No. 4 Chapel to begin next Sunday afternoon:

“Next Sunday being the regular Sunday for preaching at No. 4 chapel, it is expected that some one from Carbondale will be there to preach at 2:30 P.M.” (*Carbondale Leader*, October 5, 1883, p. 2)

A. Patterson presents beautiful lamp to No. 4 Chapel:

“Mr. A. Patterson, one of the thriving young merchants of Waymart, presented to C. L. Stanton with a beautiful lamp, this week, to be used at No. 4 chapel, for which he will receive the thanks of the members of that society.” (*Carbondale Leader*, October 5, 1883, p.2)

Pierce Butler preached to a large audience at No. 4 Chapel:

“Mr. Pierce Butler preached at No. 4 last Sunday evening to an uncommonly large audience and all present seemed very much interested in listening to the truth so ably proclaimed. Mr. Butler will speak there again next Sunday evening at 7 P.M. when it is hoped the chapel will be filled to overflowing with all who love to hear the word of God preached by a man whose whole heart and soul is in this grand work of leading men to the lamb of God that taketh away the sins of the world.” (*Carbondale Leader*, October 20, 1883, p.2)

New chimney for No. 4 Chapel:

“No. 4 chapel has a new chimney.” (*Carbondale Leader*, November 2, 1883, p. 3)

Two hundred trips per day was the average in 1883:

“J. C. Davies says if had one penny for each trip he has pulled since he has been engineer at No. 4, on an average of 200 trips per day, he would have this (Friday) night the snug sum of \$13,390. . .” (*Carbondale Leader*, November 2, 1883, p. 3)

Professor Hockenberry to speak at No. 4 Chapel:

“Prof. Hockenberry, of Carbondale, will speak at No. 4 chapel next Sunday night. He is a very interesting speaker and those who have heard him are anxious to hear him again. Everybody is earnestly invited to attend this service.” (*Carbondale Leader*, November 2, 1883, p. 3)

Full house for Professor Hockenberry:

“Prof. Hockenberry will always be welcomed by a full house whenever he comes to No. 4 Chapel to speak again.” (*Carbondale Leader*, November 9, 1883, p. 3)

Pickerel fishing good at No. 4 Pond:

“Nick Flood, sr., of No. 4, caught a fine mess of pickerel through the ice on No. 4 pond last Monday.” (*Carbondale Leader*, November 23, 1883, p. 3)

Successful Christmas tree exercises at No. 4 chapel:

“The Christmas tree exercises at No. 4 chapel were a grand success. The tree was much admired by all who saw it. Rev. L. C. Floyd received a well filled purse from the people of No. 4. C. L. Stanton, superintendent of the Sunday school, was the recipient of a beautiful easy chair from the members of the school. Other beautiful presents were received by nearly every one around No. 4 hill, and last, but not least, John C. Davies was presented with a pair of fat chickens for his Christmas dinner. It is unnecessary to state that J. C. D. enjoyed his present hugely.” (*Carbondale Leader*, January 4, 1884, p. 2)

Three thousand new rivets in the boilers at No. 4:

“The D. & H. blacksmiths have put over three thousand new rivets in the boilers at No. 4. The job cost the company over five hundred dollars but the boilers are now in first class order.” (*Carbondale Leader*, February 15, 1884, p. 2)

Sunday school to be organized at No. 4 Chapel:

“Rev. W. M. Hiller, Presiding Elder, will preach at No. 4 Chapel at 2 o’clock on Sunday, April 6. All interested in having regular preaching at No. 4 are requested to be present. The Sunday School will be organized after the services.” (*Carbondale Leader*, April 4, 1884, p. 2)

Successful business meeting held at No.4 Chapel:

“Rev. Wm. M. Hiller preached at No. 4 chapel last Sunday at 2:30 p.m., after the sermon a business meeting was held for the purpose of getting pledges to support a regular minister for No. 4. There were only a few present, but \$75 were promised for the above purpose and it was decided to have the Rev. R. P. Christopher, to preach each Sabbath at 2:30 p.m. Mr. Christopher is a man whose hair is white as snow, but he says he feels young, and in the Lord’s name he is doing a good work. He will preach his first sermon next Sunday. His text will be found in the LXXVIIth Psalm, tenth verse. The Sunday school was also organized. The officers for the ensuing year are C. L. Stanton, supt.; John E. Healey, ass’t supt.; Richard Udy, treas. The only thing wanting now to make this year successful is some one to play the organ. Will not some young man from Carbondale volunteer to come up and help us in this branch of work?” (*Carbondale Leader*, April 11, 1884, p.2)

Broken drum shaft at No. 4 interrupts coal shipments:

“The drum shaft broke at No. 4 last Wednesday, at 4 p.m., which made it necessary to stop running coal for the rest of the day.” (*Carbondale Leader*, April 11, 1884, p.2)

Largest number of cars pulled in one day: 2,295:

1884: "One week ago yesterday No. 4 engine pulled 2,925 cars of coal, the largest number of cars ever pulled in one day." (*Carbondale Leader*, April 18, 1884, p. 3)

A deep religious feeling pervades No. 4 community:

1884: "Special religious meetings are being held every night except Saturday night at No. 4 M. E. Chapel. The pastor, Rev. R. P. Christopher, preached to a large congregation last Sabbath afternoon. . . On Wednesday night the Rev. W. M. Hiller, Presiding Elder, conducted the services assisted by Mr. Pierce Butler. A deep religious feeling pervades the community. . ." (*Carbondale Leader*, October 17, 1884, p. 3)

Very successful social held at No. 4 Chapel:

"The social held in No. 4 chapel last Friday evening was a perfect success socially and financially. At 7:30 P.M. the pastor, Rev. R. P. Christopher, in a few interesting and amusing remarks made known the object of the social, namely to raise funds to repair the chapel. There was good music and singing. About 8 o'clock supper was announced and the older portion of those present soon occupied every seat around the large table which contained all the good things that could be desired, including chicken, beef, boiled ham, cake, pumpkin pie, etc. . . The table was in charge of the following young ladies: Misses Lizzie and Emma Davies and Miss Allie Miller, assisted by Mrs. Charles Monk, Mrs. A. M. Pruner and Mrs. Lew Hubbard. About fifteen dollars was realized from the supper. Miss Hettie Davies favored us with some good music during the evening. Mr. Lew Hubbard, in a good speech, proposed that they build a shed for the pastor's horse and take up a subscription for the purpose. A shed will be built at once. This social was the first ever held at No. 4, but I believe others will follow during the winter as this one was so much enjoyed by all present. Great credit is due Misses Lizzie and Emma Davies and Allie Miller, the managers, for their efforts to please everyone." (*Carbondale Leader*, November 25, 1884, p. 1)

The champion skater at No. 4 Pond is R. W. Weed:

"No. 4 pond is now a vast skating rink. R. E. Weed is said to be the champion skater." (*Carbondale Leader*, December 4, 1885, p. 4)\

End of "The Community at Number Four"

Mrs. McDermott escapes, miraculously, death:

“Mrs. Peter McDermott, of No. 4, met with a serious accident on Wednesday afternoon. She was walking up No. 4 plane, between the wall of No. 3 breaker plane_and the main road_at a point where there is only about four feet space to stand when a trip is passing up No. 4 plane. She saw the trip coming and stepped back as far as possible, but in some manner her dress caught on the trucks and she was thrown down, as she fell her head struck the wall, cutting a fearful gash. She was taken to her home unconscious. It was thought she could not recover, but she was better yesterday, and Dr. Gillis has hopes of her recovery. Her escape from instant death was miraculous.” (*Carbondale Leader*, January 2, 1885, p. 1)

Officers elected at No. 5 Chapel Sunday school, 1885:

“The Sunday school at No. 4 chapel elected their officers last Sunday for the ensuing year. John Healey was elected Superintendent; C. L. Stanton, Assistant Superintendent; Richard Udy, Treasurer; F. M. Osborne, Secretary. The school has been quite well attended during the winter and starts out this spring with good prospects.” (*Carbondale Leader*, April 7, 1885, p. 1)

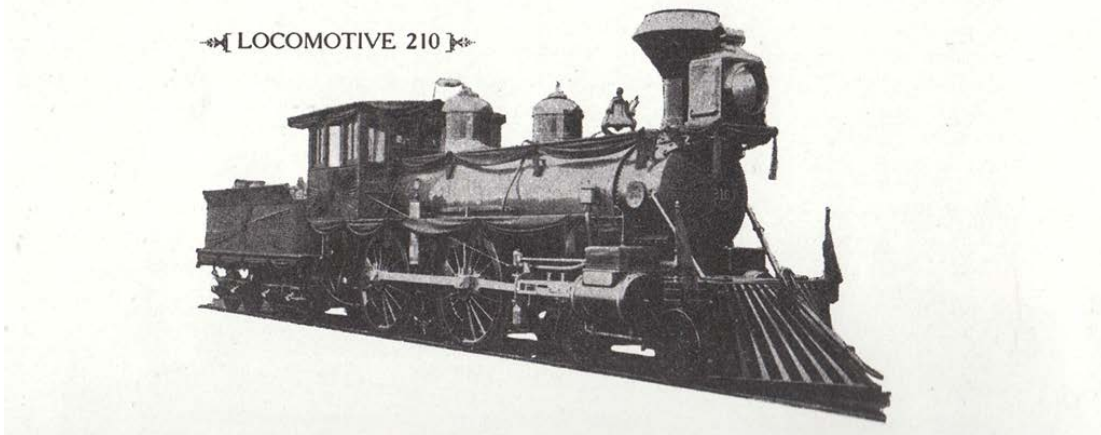
Flags along the Gravity Railroad at half-mast at the death of U. S. Grant:

The flags along the gravity are at half-mast [U. S. Grant died on July 23, 1885]. / The gravity boys have a base-ball club. James Bryden is captain and Frank Shannon secretary. They want to play the Carbondale club some time.” (*Carbondale Leader*, July 24, 1885, p. 1)

D&H engine No. 210 hauled the General Grant Funeral Train, August 4, 1885:

Railroadians. . . , p. 46:

Of the passenger power, the "210" is distinctive, having been used to haul the "General Grant Funeral Train," August 4, 1885. This locomotive was built by the Dickson Manufacturing Co. in 1884 and had:—nineteen by twenty-four inch cylinders; sixty-eight inch drivers; boiler, fifty-two inches in diameter, with steam pressure of one hundred thirty-five pounds; firebox, ten feet four inches by forty-two inches wide; one hundred ninety, two inch tubes; weight, ninety-three thousand pounds in working order; tractive power, nineteen thousand one hundred seventy pounds.



Five hundred trips sent up the mountain on Monday:

1885: "500 loaded trips were sent up the mountain on Monday." (*Carbondale Leader*, December 4, 1885, p. 4)

John Fenton, headman at No. 4, dies of pneumonia:

"John Fenton, boss headman at No. 4 on the D. & H. Gravity road, died on Friday of pneumonia, after an illness of about four days. The funeral took place on Sunday afternoon from his late residence near No. 4 in the Township, the interment being in the new Catholic cemetery. Deceased was 37 years of age, and leaves a wife and five children." (*The Journal*, January 20, 1887, p. 3)

Temperance work at No. 4 Chapel next Sunday:

"Meetings are held at No. 4 chapel each Sunday evening now. We understand that next Sunday evening will be devoted to temperance work. / Rev. J. L. Thomas will preach his farewell sermon at No. 4 Sunday afternoon. It is hoped there will be a full attendance at that time." (*Carbondale Leader*, March 31, 1887, p. 4)

Neighbors helping neighbors, at No. 4:

"The men at No. 4 are clubbing together to secure their hay crop, making old-fashioned bees." (*Carbondale Leader*, July 21, 1887, p. 4)

Hungarians causing problems at No. 4:

“The News in Simpson. / SIMPSON, AUG. 11.—Hungarians living in a lately erected house at No. 4 are creating a nuisance that certainly ought to be stopped, if it is not shortly remedied the travelling public will have to see the township health officers. . . (*Carbondale Leader*, August 11, 1887, p. 4)

Christmas tree in No. 4 engine house:

“The friends of J. C. Davies presented him with a very beautiful Christmas tree, well loaded with all the delicacies of the season on Christmas eve. The presentation speech was delivered by H. W. Powderly, to which Mr. Davies responded in appropriate terms. The tree was on exhibition at No. 4 engine house and was much admired by all who saw it.” (*Carbondale Leader*, December 29, 1887, p. 4)

Roy Foster hurt riding the cars on the way to work at No. 4 Stone Quarry:

“Roy Foster, son of Engineer Foster of No. 8 met with an accident this morning which will probably result in the loss of his big toe on the right foot. Roy has been employed as water boy at No. 4 stone quarry and has been in the habit of riding from No. 9 down to his work every morning on the first train. As he went to get off this morning his toe got caught in the wheel and was pretty badly ground before he was released from his perilous position. Roy has got the sand. He says that the toe won’t keep him in the house but a few days.” (*Carbondale Leader*, July 12, 1892, p. 4)

Stone cutters at No. 4 quarry get a raise:

“The stone cutters at No. 4 quarry have had a raise of fifty cents per day and now get \$3.50.” (*Carbondale Leader*, September 1, 1892, p. 2)

Where was No. 4 stone quarry? I have not seen it indicated on any maps? In the article on No. 4 Dam given on the following page, we read: "It [Number 4 Dam] is composed of conglomerate rock taken from the quarry on the Alden tract, not far from the pond."

The Methodists at No.4 have been "thrown off" by the Carbondale Methodist church:

“While the Presbyterians have built a new church at Monkey Run as a branch to the Carbondale church it is understood that the Methodist church of Carbondale has thrown off the little flock at No. 4, to shift for themselves, there not being money enough to entice them up this way.” (*Carbondale Leader*, October 24, 1892, p. 4)

No. 4 dam completed:

“THE DAM COMPLETED. / It is a Most Handsome and Durable Piece of Work. / The big dam at No. 4 pond which is to increase the supply of water offered to the residents of this city by the Crystal Lake Water company is completed and a most credible piece of masonry it is. / The contractors Messrs. Babcock and Kelly are justly proud of the accomplished work and are willing to place it in comparison with any similar job in this section, believing that the verdict of experts will agree that in no way does it fall beneath the standard called for in first class work. / The directors of the corporation are more than pleased with the appearance and solidity of the masonry. The building of the dam has occupied four months and during that time an average of sixty-five men have been employed by the contractors. The length of the masonry is 500 feet, and the wall is twenty-eight feet thick at the bottom; twenty-eight feet high and at the top is narrowed down to six feet in thickness. / It is composed of conglomerate rock taken from the quarry on the Alden tract, not far from the pond. Several thousand barrels of cement were used in the construction of the big wall. It occupies a conspicuous position, standing so close to the tracks of the gravity railroad and has received much attention from the myriad excursionists who passed over the road during the past summer. Its proximity to this iron highway will always bring it into prominent notice before the public and no pains will be spared by the contractors to make it a standing advertisement for them. / Another marked improvement that has been made around the source of supply of this company is the dredging of the entire pond. This has gone on for several months and now its banks and surface present a decided contrast to their former condition. Over a score of men have been employed in the work for several weeks and the stumps, underbrush all deleterious matter has been removed. During the time when cars were not running over the inclined road, a small engine was pressed into the clearing up work. / A vast amount of money has been laid out by the Crystal Lake company during the summer on the perfecting of their plant and now Carbondale can boast of as plentiful supply of pure water, distributed through a large territory, as any city in the state.” (*Carbondale Leader*, November 30, 1892, p. 4)

6812

Plane No. 5

--Plane: 1,294 feet long (rise 130 feet): steepest plane in the system

--Level 5: 209 feet long (fall 2 feet)

Engineers at the head of the plane:

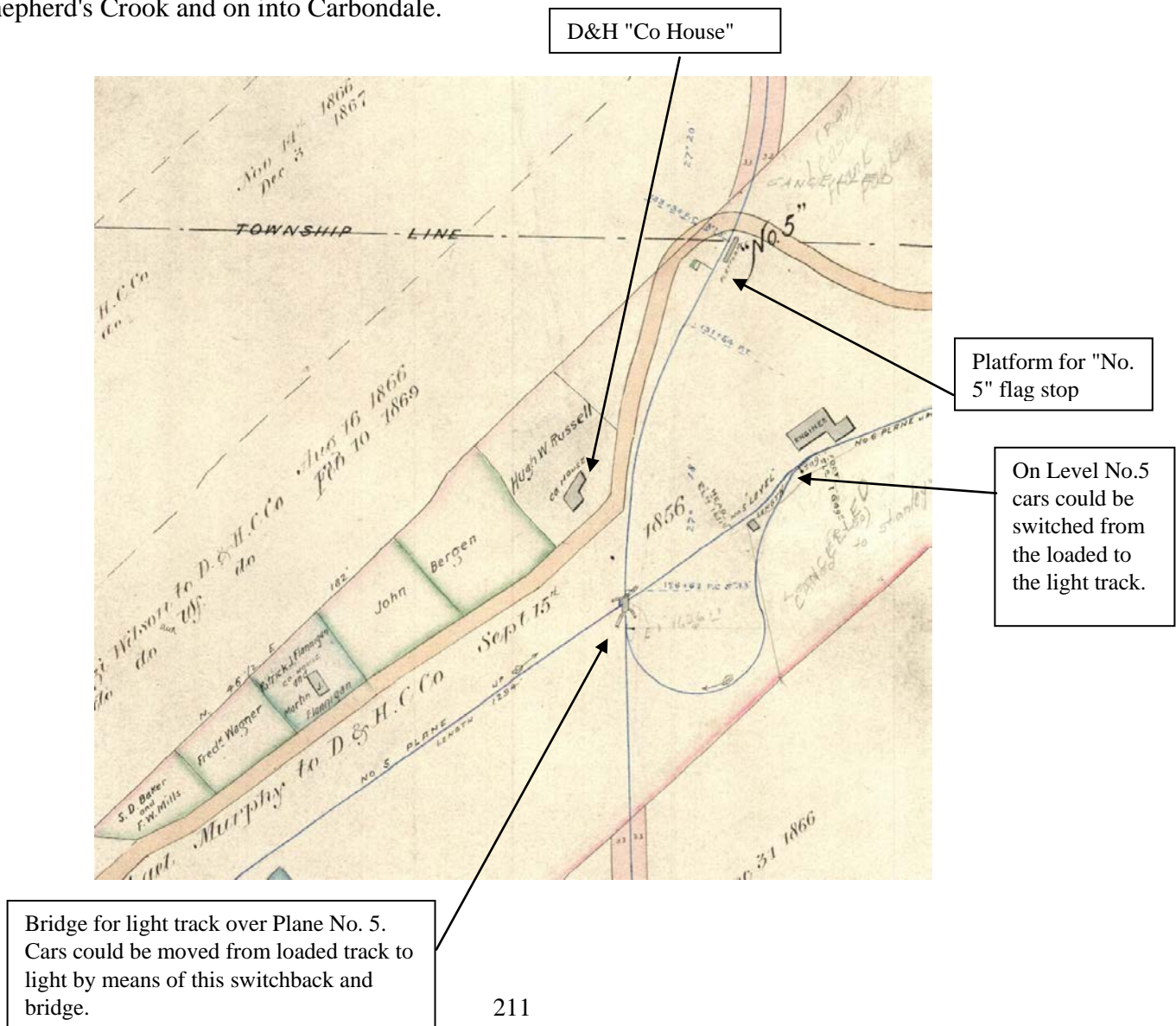
“No. 5, whether in the order here given, were Ned Farrell, John C. Davis, J. B. Smith, Orlando Foster, William Miller, Adam Hunter*, who died after running the engine from 1876 to 1887, Samuel T. Chubb. Some accounts give John C. Davis as the first engineer at No. 5, and that was the engine he helped to erect.” (*Joslin/Davies*)

*Adam Hunter: 1880 (p. 452c): "ADAM HUNTER, engineer at engine No. 5, was born in Scotland, in 1834, and married Mary Lynce, of Ireland. He was a sailor about nineteen years, and came to Carbondale in 1869, and has since been in the employ of the D. & H. C. Company, formerly at engine No. 3."

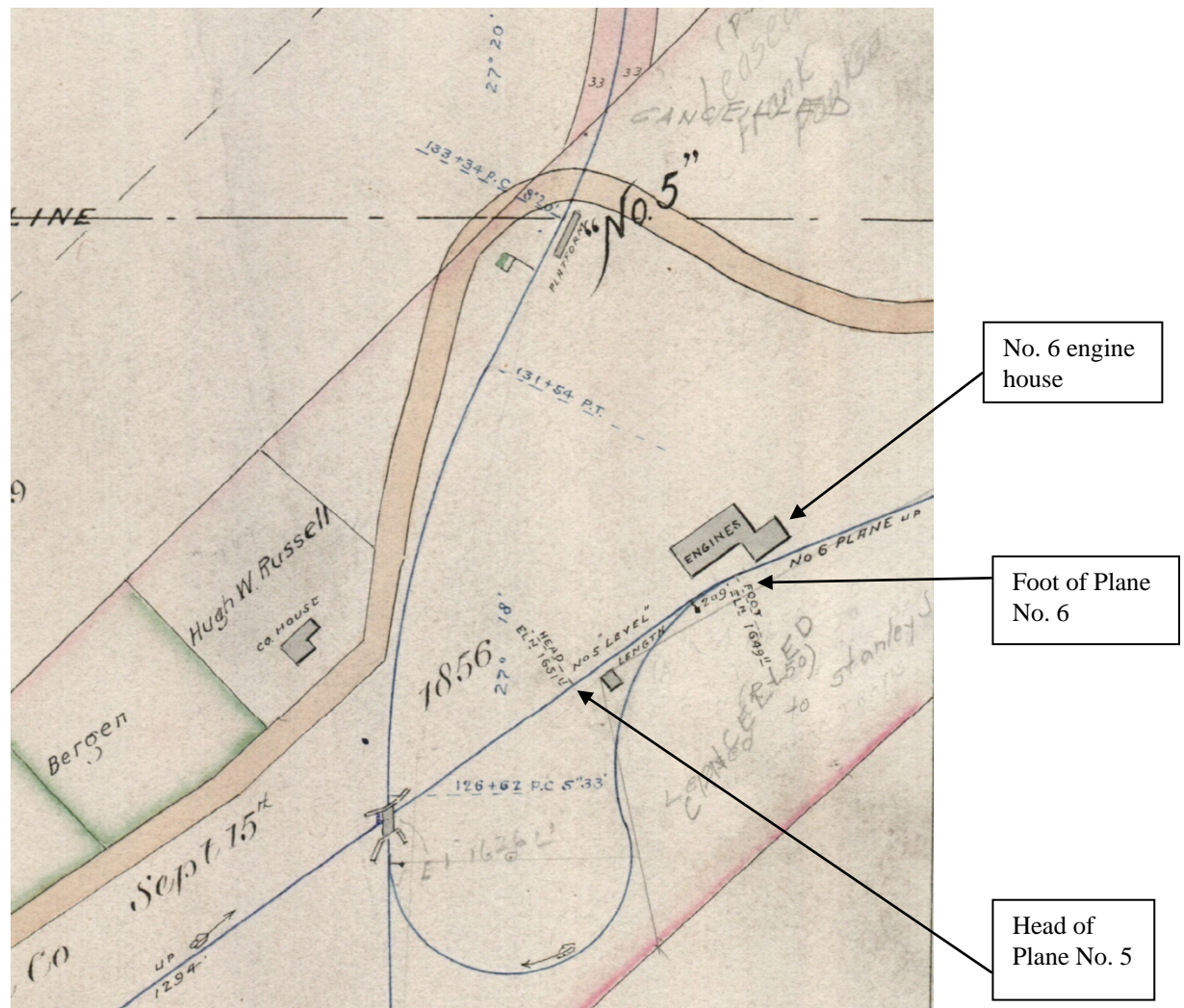
1895 Gravity Railroad map

No. 5 Plane and Run-Around/Switchback: two views from the 1895 Gravity Railroad map volume.

To move cars from the loaded track to the light track at Plane No. 5: the cars would have been taken up the plane and then dropped back through the run-around/switchback, the cars being switched onto the light track (just before the bridge over Plane No. 5) and then moving over Plane No. 5 on a bridge. The cars would then move down the hill, on the light track, towards Shepherd's Crook and on into Carbondale.



Here is a closer look at the same site:



Given below is a photo of Plane No. 5, from the collection of the Waymart Area Historical Society. We are looking down Plane No. 5. At the foot of the plane can be seen the Racket Brook Breaker and the head of Plane No. 4. The bridge shown here crossing Plane No. 5 is the bridge over Plane No. 5 for the light track that was near the head of Plane No. 5. (The cars to be switched were merged into the light track just before the bridge.) By means of this run-around, cars could be switched from the loaded track to the light track. Cars moved to the light track would then move through Shepherd's Crook and on down the valley. Plane No. 5 was the steepest plane in the system. Cars moving across this bridge would move from left to right and head North towards Shepherd's Crook.

Light track bridge over Plane No. 5. Cars to be switched from Plane No. 5 to the light track were sent through the run-around that originated on Level No. 5. The cars on the run-around were then merged into the light track just before it passed over this bridge, from left to right.



Plane No. 5. 1859. 1868

On Saturday, July 26, 2008, following the dedication of the replica of the Gravity Railroad Canal Company Open Summer Passenger Car 43 at Waymart, Rich Wagner and S. R. Powell were shown by John V. Buberniak the exact location of the nineteenth-century switchback at No. 5 (switchback installed in 1868 or later to make it possible there to transfer cars from the loaded track to the light track). We accessed the site by going up No. 7 Road above White's Crossing. On the walk up the light track to the site, we located the remains of a D&H pail, on which is clearly legible the company name ("D & H CO"), a metal fragment of a D&H coal car (a T-

shaped piece of metal that strengthened the sides of the cars by reinforcing the junction of the vertical and horizontal lumber in the sides of the cars), and a Gravity Railroad spike. John then walked us through the deep, rock-lined, curving cut through which the cars passed on the switchback. The cars came up the hill from Carbondale. A switch was located on the level at the head of the plane. The cars there could be switched from the loaded track to the light track. The cars descended, backwards, through the switchback curve to the right and were then moved onto the light track (just before the bridge) for the trip down through Shepherd's Crook and then down into Carbondale and points south. Remnants of railroad ties can still be seen in the tight portion of the curve.

This switchback must be visible on the Geological Survey maps of Carbondale-Waymart that were produced in the 1890s/early 1900s.

Accidents, Facts about the Plane, and Daily Life

Fire at Number 5 in 1869:

"Loss of an Engine House. / On Tuesday evening of this week, at about 7 o'clock, Davis' Engine whistle sounded an alarm of fire and gave "five" as the location. Eyes were turned up the line of the Railroad, and a bright light could be seen from elevated points on the Mountain section. No. 5 engine house was in full blaze and very soon burned to the ground destroying nearly everything under its roof. / The fire is supposed to have caught from a forge which had been used by the workmen engaged in making repairs in the Engine room during the day. / The work of rebuilding is being prosecuted by Supt. Manville with great energy as usual." (*Carbondale Advance*, June 12, 1869, p. 3)

Charles Gilby dies following accident on Plane No. 5:

March 31, 1874: "Charles Gilby, had leg crushed on No. 5 plane, near Carbondale, from effects of which he died the same night." (*PA Auditor General Report 1874*, p. 129)

On September 1, 1879, Charles Schuster (30 Mitchell Avenue, Carbondale; born in Clinton Township, Wayne County, on August 27, 1850) began working on the Gravity Railroad:

"He was first employed as a headman on No. 5 (plane) at \$18 a month. In this work he did the hooking or unhooking of the cars as they broke over the head of the plane either in descent or ascent of it, and in doing this was obliged to ride the trips for a short distance. / He had worked just twenty-four days when, in unhooking a trip that had just come up the plane, his hold was broken and he was thrown against the bank alongside the tracks. In trying to recover himself, his right pant leg was caught by some protruding part of the truck and his leg drawn under the

wheels. Nine wheels passed over it before the movements of the trip were stopped. The bone was completely severed and only a tendon about the size of a finger, held the leg together. This, fortunately, protected the artery. The first thought of the physician who was called to attend him, was to amputate it, but he quickly decided to try and save it instead. Then for many weeks there was an uphill struggle in which the physician's skill was put to a severe test and Mr. Schuster's nerve and patience sorely tried. At last signs of improvement were to be seen and at the end of a year he was able to leave his bed and soon after return to his work without the aid of crutches or even a cane. The leg had been kept exceptionally straight and was but slightly shorter than when injured. Several fragments of the bone he kept as pocket pieces and these he carries with him even today. Of another, he had a brotherhood pin made after he had become a locomotive engineer years later." / Thereafter, for many years, he worked for the D&H in various capacities. On February 1, 1888, he was promoted to an engineer. Before he began working on the railroad as such, he worked for the D&H in the construction of the feeder pond at Pleasant Mount known as Hankinson's Pond. / "During 1868 and 1869, he was employed temporarily by the Delaware and Hudson Canal Company under Joe Stahl, a foreman, who had charge of the construction of a reservoir at Mt. Pleasant, or Hankinson's Pond, about fifteen miles northeast of Waymart, the water of which, when completed, fed the canal as needed. There were fifteen or twenty such dams built during canal and gravity railroad days to serve as feeders for the canal or to supply power at various planes on the gravity railroad during its earlier years of operation. * [emphasis added] / The dam, as he remembers it now, was of solid rock masonry, seven or eight hundred feet in length and about thirty-eight feet high. It was a very neat piece of work, and is standing today as firmly as when completed. An average force of approximately 150 men was employed on it." (Biographical portrait of Charles Schuster, "Owes All to Surgeon's Skill," that was published on pp. 3-4 of the August 1, 1925 issue of *The Delaware and Hudson Company Bulletin*.)

*Jacob Stanton was the Superintendent of the D&H canal feeder reservoirs in 1872.

Charles Scheutzer killed in accident at No. 5:

"On Wednesday afternoon a German named Charles Scheutzer met with a very serious accident at the head of No. 5 on the gravity road. Scheutzer is a green hand, having been employed on the road but two or three weeks. A trip of unloaded cars was being switched off on the branch [from loaded track to light track] and was going at a rapid rate of speed. Not knowing the danger he ran of losing his life, Scheutzer attempted to jump on the last car but one of the trip. He was thrown twelve or fifteen feet in the air, and when he fell he struck the track and two cars ran over his right leg below the knee. All the bones were crushed into fine pieces. The injured man was taken to a house near by and medical assistance was secured as soon as possible. The physician who attended him took out a number of small pieces of bone with his fingers, and first it was thought that amputation would be necessary. It was thought best to wait a few days to see if there would be any circulation of blood in the part below the wound. Up to Friday noon the leg had not been amputated." (*The Critic*, September 27, 1879, p.3)

Son of Charles Smith killed on bridge over No.5 Plane:

“A sad accident happened near No. 5 plane on the gravity track Wednesday afternoon resulting in the death of an eight-year old son of Charles Smith who is employed at No. 4. It seems the little fellow was standing on the bridge on which the light track is built across No. 5 plane, [emphasis added] and was watching a train of loaded cars coming up [No. 5 plane], and as is supposed, owing to the noise, did not observe a train of light cars which was then approaching the bridge. He was struck by the train, thrown under the wheels and his body was terribly mangled, life becoming extinct almost immediately. The accident occurred about four o’clock, as the boy was returning home with a pail of wild strawberries which he had picked in the fields. (*Carbondale Leader*, July 1, 1881, p. 4)

The Smith accident as reported by the *Carbondale Advance*:

“**Fatal Accident.** / Friend Smith, son of Charles Smith, aged about eight years, was killed on Wednesday afternoon on the bridge crossing No. 5 plane. He stood on the bridge watching the loaded cars going up, when an empty train which he had not observed struck him, and one car passed over him. One leg was cut off, the other badly cut, and there were also severe cuts and bruises upon the head and body. He was taken to his father’s house near by, and Dr. Burnett sent for, but he died in a few minutes, soon after the messenger left.” (*Carbondale Advance*, July 2, 1881, p. 3)

Shelter needed at the high-works at No. 5:

“There should be some kind of a shelter built at the high-works at No. 5 for the accommodation of those who are obliged to wait there for the passenger [train].” (*Carbondale Leader*, June 22, 1883, p. 3)

The township road will now cross below the highworks at No. 5:

“The township road is being changed at No. 5 this week, so that it will cross below the highworks instead of under it as heretofore.” (*Carbondale Leader*, October 5, 1883, p. 2)

The highworks at No. 5 are no more:

“The highworks at No. 5 is a thing of the past.” (*Carbondale Leader*, October 19, 1883, p. 2)

Broken sling on Plane No. 5 causes quite a runaway:

“A sling broke on No. 5 plane on Tuesday last causing quite a runaway.” (*Carbondale Leader*, May 2, 1884, p. 2)

James Monk of No. 5 teaches roller skating at the Opera House rink:

“James Monk, of No. 5, is one of the instructors at the Opera House [roller skating] rink.” (*Carbondale Leader*, April 10, 1885, p. 1)

Substitute worker at No. 5 killed in accident:

“**Fatal Accident at No. 5.** / Another of those terrible accidents that send a feeling of sadness over the community occurred at No. 5 last Saturday at 3 p. m., by which August, eldest son of Mr. and Mrs. Charles Blott, of No. 6, was fatally injured. He had not been employed on the road

lately except for an hour or so at a time when a man wanted to get off. Samuel Thorp, foreman at No. 5, was obliged to go to Carbondale on Saturday and he got August to run cars over the head during his absence. The man who was unhooking was obliged to be away for a few moments and he asked August to unhook two or three trips for him as he had done that kind of work before. When the second trip that he was to unhook came up he got on all right but in stooping down to reach the hook his hand slipped from the car and he fell in ahead of the trip. His left leg was thrown on the rail and caught by the forward wheel, and before the cars could be stopped two wheels had passed over his leg near the hip. He was removed to his home and medical aid summoned, but without avail, for at 7:40 p. m. death relieved him of his sufferings. August was a steady, industrious young man aged 17 years and 9 months. The funeral was held from the chapel at No. 4 yesterday at 3:30 p.m., Rev. R.P. Christopher officiating. The pall bearers were James Monk, Robert Craig, George Sontag, William Davies, Alonzo Foster and Eugene Shaffer. The funeral was largely attended. The parents have the sympathies of the entire community in their affliction.” (*Carbondale Leader*, June 9, 1885, p. 1)

New rail to be laid on the light track between No. 20 and No. 5:

“New rail is soon to be laid on the light track between No. 20 and No. 5, for which the boys are thankful.” (*Carbondale Leader*, June 30, 1885, p. 1)

“Death of Adam Hunter. / Adam Hunter, engineer of Gravity engine No. 5, of the D. & H. C. Co., died suddenly on Friday. He had been out of health for some time, and only two days before his death, went to Scranton to consult with Dr. Leet. After eating his dinner on Friday he went up stairs to lie down, and upon reaching his chamber fell heavily upon his bed. His wife heard the noise of the fall, and rushing up stairs found him dying. He lingered but a few moments afterward. His death was caused by heart disease. He was fifty years of age, and leaves a wife and three children—Minnie residing in Philadelphia, Jennie, wife of David Wolcott, of this city, and Thomas, aged about 9 years. The funeral services were held on Sunday afternoon, interment in the new Catholic cemetery.” (*The Journal*, October 20, 1887, p. 3)

6813

The “Switchback” in 1883? Hendrick's Depot in 1883?

The “Switchback” in 1883:

In section 6851 (Switchbacks in the 1868 Configuration) we focus on four switchbacks in the 1868 configuration: the one at the head of Plane No. 5, the one at the head of Plane No 9, the one at the junction of the Light Track and the Cripple Car track, and the one on Level No. 2 on loaded track near the foot of Plane No. 3.

From the newspaper notice given below, we learn that Barney Brennan, a young man employed as a patcher at the Switchback, had his shoulder blade broken by being thrown from the cars:

“Barney Brennan, a young man employed as patcher at the Switchback, had his shoulder blade broken on Wednesday last by being thrown from the cars.” (*Carbondale Leader*, June 29, 1883, p. 3)

At which switchback was Barney Brennan injured?

Hendrick's Depot in 1883:

From the newspaper notice given below, we learn that John Tonkin injured his leg by jumping off the cars between the Switchback and Hendrick's depot.

“John Tonkin, employed as track hand for Henry Lippert, had his leg injured on Wednesday, by jumping off the cars between the Switchback and Hendrick’s depot.” (*Carbondale Leader*, June 29, 1883, p. 3)

At which switchback was John Tonkin injured.

Between "the Switchback and Hendrick's depot." We do know that E. E. Hendrick first began the business of oil refining on the line of the Gravity railroad. That we know from a statement in Hitchcock (Volume II, p. 329): "E. E. Hendricks [sic] first began the business of oil refining on the line of the Gravity road. In 1876 he moved his plant to the west side of the river, and built on a much larger scale."

Was the Hendrick depot on the light track on the hill above E. E. Hendrick's Carbondale property on Lincoln Avenue?

6814

Plane No. 6

--Plane 6 was 1,253 feet long (rise 110.19 feet)

--Level 6: 216 feet long (fall 2.10 feet)

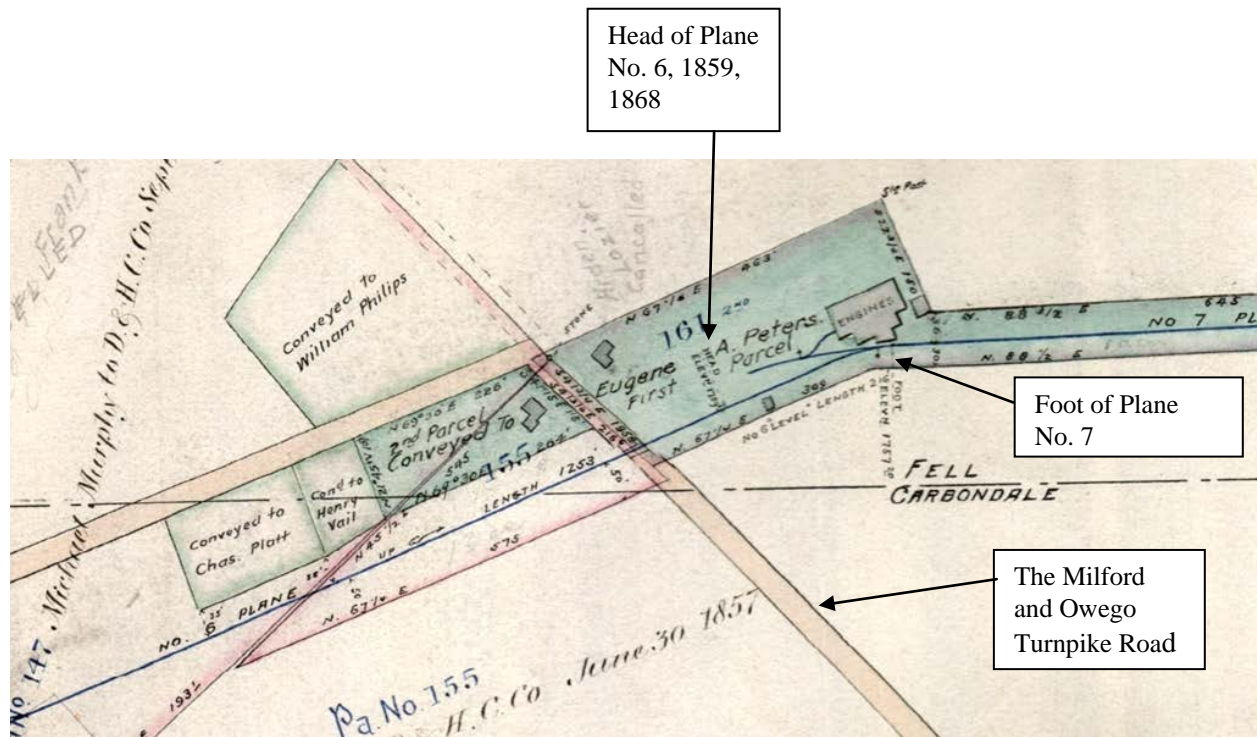
Plane 6: shortest plane in the system, 1,252 feet

Engineers at the head of Plane No. 6:

“At the new plane No. 6 John Foster was engineer from 1865 to the close of the road.” (*Joslin/Davies*)

1895 Gravity Railroad map volume

Head No. 6 Plane, Foot of No. 7



Note that the foot of Plane No. 6 is in Carbondale, and the head of Plane No. 6 is in Fell Township.

Engine House at No. 6 endangered by fire:

1872: **“Fire on the Mountains.** / Fire has been raging on the mountains east of us during the week. On Monday evening the whistles of the Stationary Engines give the fire alarm, which was responded to vigorously by those in town. No. 6 Engine House was believed to be in danger. It created quite a sensation in town, and many went up the line to do what might be necessary to save the property there. No damage was done.” (*Carbondale Advance*, May 4, 1872, p. 3)

Willis Grambs hurt in attempting to get on a passing train at No. 6:

“Willie Grambs, was hurt upon the Mountain Division of the Railroad at the foot of No. 6, on Saturday last at about half past 9 in the forenoon. He was attempting to get upon a passing train, and in falling upon the rail his arm was twice broken although the cars did not pass over it.”
(*Carbondale Advance*, January 7, 1882, p. 3)

Nellie Bates injured in fall from an ash car:

“**Broken Limb.** / On Thursday evening, May 4th, as Nellie, a three year old daughter of John Bates, fireman of No. 6 Engine, was being helped from an ash car by her little brother, they suddenly fell and broke her right limb above her knee. Dr. Niles of Waymart acted as surgeon.”
(*Carbondale Advance*, May 13, 1882, p. 3)

More on Dr. John Southworth Niles:

"Dr. John Southworth Niles, the son of Andrew Niles, M.D., and Margaret (Dorr) Niles, was born April 16, 1862, at Waymart, Wayne County, where he attended the public schools, and afterwards Pleasant Mount Academy and the Millersville Normal School. In preparation for his career, he matriculated at Jefferson Medical College, Philadelphia, where he graduated with his degree of Doctor of Medicine in the class of 1891. He has since resided in Carbondale, where he is an accomplished surgeon, his practice being entirely confined to surgery. [Emphasis added] Doctor Niles is a member of the American Medical Association, the Medical Society of the State of Pennsylvania, and the County Medical Society. He is dean and surgeon-in-chief of the General Hospital, at Carbondale; and he is chief surgeon for the Hendrix [sic] Manufacturing Company, the Carbondale Welding Company, the Carbondale Machine Company, and the Cross Manufacturing Company, and local surgeon for the Delaware & Hudson Railway Company and the Hudson Coal Company. [emphasis added] His religious faith is that of the Presbyterian Church. / Dr. John Southworth Niles married, April 23, 1903, in Philadelphia, Bertine Hunsicker. . ." (*Jubilee History of Lackawanna County, Pennsylvania* by Thomas Murphy. Volume II, 1928, p. 847)

See also the portrait of Dr. Niles in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897, pp. 730-31. In this latter portrait we read:

"His [Dr. Niles] father, Andrew Niles, M. D., a man of wide research and excellent professional reputation, was born at White Creek, Vt., and in early manhood graduated from the Philadelphia Medical College, after which he settled at Waymart. In 1891 Dr. Niles was united in marriage with Miss Alice Hunsicker, of Collegeville, Montgomery County, Pa., daughter of Abram and Rachel (Rittenhouse) Hunsicker, both being members of the oldest families of the state."

Note: These two references give a different year of Dr. Niles' marriage and a different name for his wife: April 23, 1903, Bertine Hunsicker; 1891, Alice Hunsicker. Possibly he married two different women with the name Hunsicker?

Elk Hill can be seen from the head of Plane No. 6:

1882: "Elk hill can be seen from No. 6 head, an autumn bouquet surrounds it." (*Carbondale Leader*, October 6, 1882, p. 2)

Delays caused by crack in spur wheel shaft at No. 6:

"A spur wheel shaft was found cracked at No. 6 last Wednesday morning, and there was no coal pulled up the plane until 11.30 A. M. The passenger was only 50 minutes late." (*Carbondale Leader*, June 1, 1883, p. 3)

Delays caused by broken eccentric strap at No. 6:

"A broken eccentric strap at No. 6 delayed the coal and passengers over an hour on Tuesday afternoon, last." (*Carbondale Leader*, September 28, 1883, p. 3)

Prayer meeting held at the residence of John Bate at No. 6:

"A cottage prayer meeting was held at the residence of Mr. John Bate, at No. 6, last Wednesday evening." (*Carbondale Leader*, November 23, 1883, p. 3)

George Chapman now to work in the D&H Car Shop:

"George Chapman, of No. 6, has accepted a position in the D. & H. car shop at Carbondale." (*Carbondale Leader*, March 14, 1884, p. 2)

Footman at No. 6 almost in bad accident:

"August Blott, footman at No. 6, met with a narrow escape from serious injury, if not instant death, on Tuesday last. He hooked on his trip of loaded cars and in so doing got fastened between the shank of the hook on the sling and the small link on the cone. He tried to get loose but failed, and then his only chance for life lay in his jumping upon the sling, which he did, and the trip started up the plane at the rate of 20 miles an hour. The trip was nearly half way up the plane when the headman at No. 7 discovered the perilous position of the footman. The engine was stopped at once and August was rescued. He was badly frightened, and one of his fingers was badly bruised, otherwise he was uninjured, but August don't care to take another ride of the same kind." (*Carbondale Leader*, March 21, 1884, p.2)

Coal shipments interrupted by the breaking of the crank shaft at No. 6:

"The crank shaft at No. 6 broke at 4:10 p. m. on Saturday and the running of coal was abandoned for the rest of the week." (*Carbondale Leader*, December 16, 1884, p. 1)

New bridge over township road on Plane No. 6:

“A new bridge has been built over the township road on No. 6 plane.” (*Carbondale Leader*, May 22, 1885, p. 1)

Richard Udy kills six snakes on Plane No. 6:

“Richard Udy had a deadly conflict with snakes on plane 6 Saturday afternoon, but the ‘gritty little knight of de oil can’ came off with flying colors after leaving six of the reptiles upon the field of battle.” (*Carbondale Leader*, April 13, 1886, p. 4)

Charles Colbath at No. 6 is the *Carbondale Leader's* agent on the gravity road:

A bracketed note at the head of the column titled “**Along the Gravity**” on page 4 of the March 3, 1887 issue of the *Carbondale Leader* reads as follows: “Charles Colbath at No. 6 is the regularly authorized agent for *The Leader* on the line of the gravity road. All subscribers there will be expected to make their monthly payments to him and they will be furnished with a receipt. He will be pleased to serve any who may desire the paper regularly at 30 cents per month.”

New head house at No. 6 now being built:

“Wallace Case is building a new head house at No. 6 upon the same plan as those at Nos. 4 and 7. They are provided with two rooms, one for tools, lamps, oil &c.” (*Carbondale Leader*, March 3, 1887, p. 4)

Richard Udy (the snake killer, see above) will move to Bethany:

“This is Richard Udy’s last day on the railroad, he will remove his household goods to Bethany on Thursday. Mr. Udy has been a faithful employe of the D. & H. since 1871. He and his estimable family will be much missed here.” (*Carbondale Leader*, March 22, 1887, p.4)

The coal branch at No. 6 now being rebuilt:

“A large force of men are engaged in rebuilding the coal branch at No. 6.” (*Carbondale Leader*, November 19, 1887, p. 4)

Miss Bertha Clark was the teacher at the select school at No. 6:

“The select school at No. 6 opened Monday the 19th with Miss Bertha Clark as teacher.” (*Carbondale Leader*, September 20, 1892, p.2)

Plane No. 7

--Plane was 1,410 feet long (rise 101.61 feet)

--Level 7: 1,809 feet long (fall 15.79 feet)

1895 Gravity Railroad map

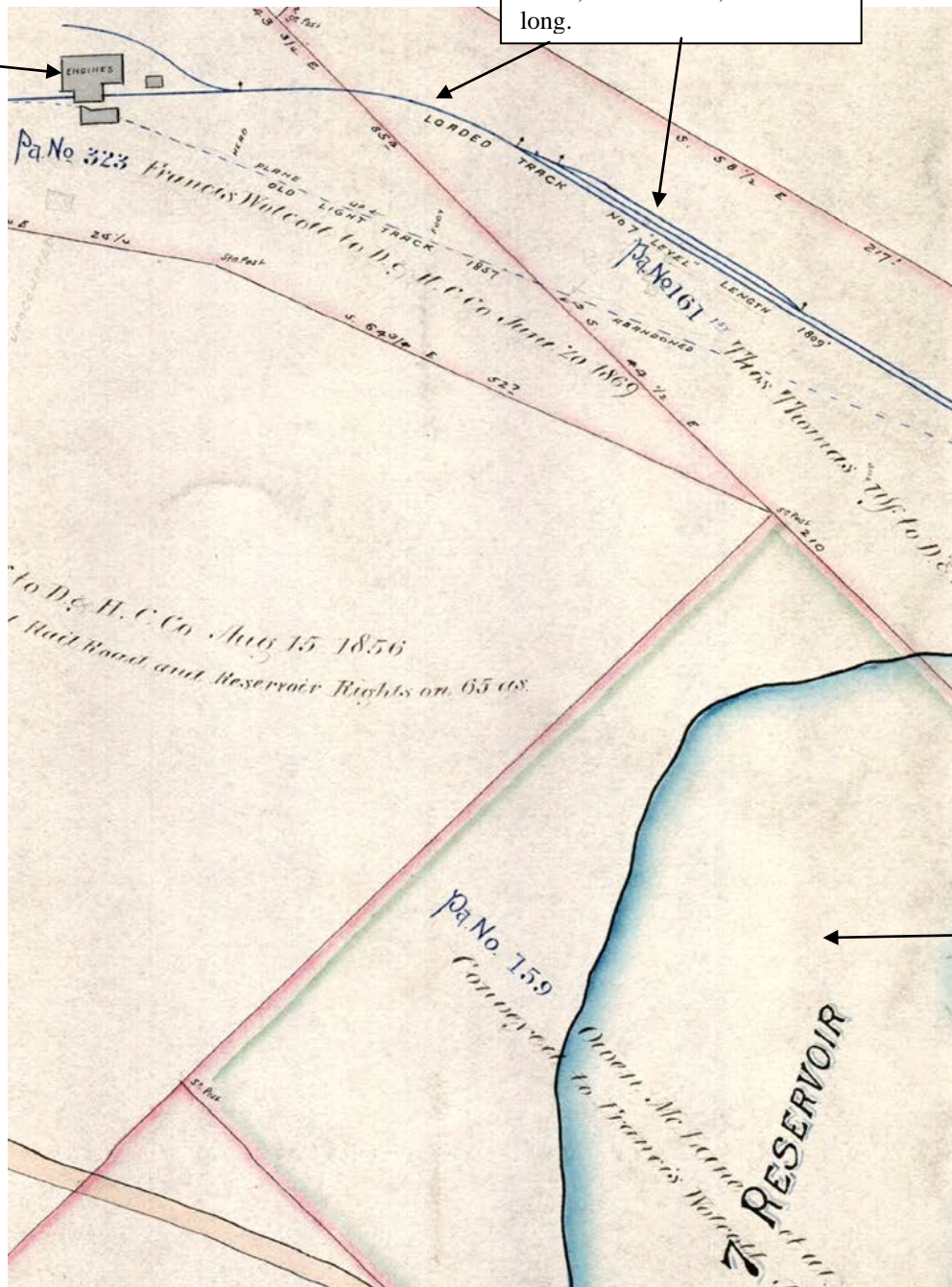
No. 7 engines (left) and No. 7 level

With the opening of the light track in 1868, the return tracks for empties on Planes No. 7 and No. 8 were no longer needed. Those return tracks are indicated by dotted lines on the 1895 maps in the Gravity Railroad volume.

On August 1, 1880, David Wolcott, who was born March 4, 1841 on the family farm in Canaan Township, began working on the Gravity Railroad, we learn from his biographical portrait ("Liked Gravity Days Best") in the January 1, 1926 issue (pp. 3-4) of *The Delaware and Hudson Company Bulletin*, as a footman "at the foot of 'old 7,' between Whites and Farview." (p. 3) At the time of his retirement in September 1924, Wolcott recalled his days of working on the Gravity as follows: "Theirs [those who worked on the Gravity] was a great work. It was not easy; rather than this, there was no limit to the hours a man might remain on duty, working methods were crude, safety devices unknown, and the running of trains, on the whole, was a daring undertaking. But the romance was without comparison; it was fascinating, compelling and carried with it an appeal that very much suited the boy or his elder in whose veins coursed the red blood of adventure. / 'Those were the best days of all,' is the way David Wolcott of No. 77 South Main Street Carbondale, Pa., a retired trainman, sums up his forty-three years and one month of continuous service with the Company. 'We surely did have good jobs in those days. The engineers and headmen with their houses and coal furnished, were better off than any man is today. They went to work at 6:30 o'clock in the morning and stayed on duty until their work was done at night. Their pay wasn't big. Some of the engineers would draw seventy and seventy-two dollars a month, and that was about the best.' " (p. 3)

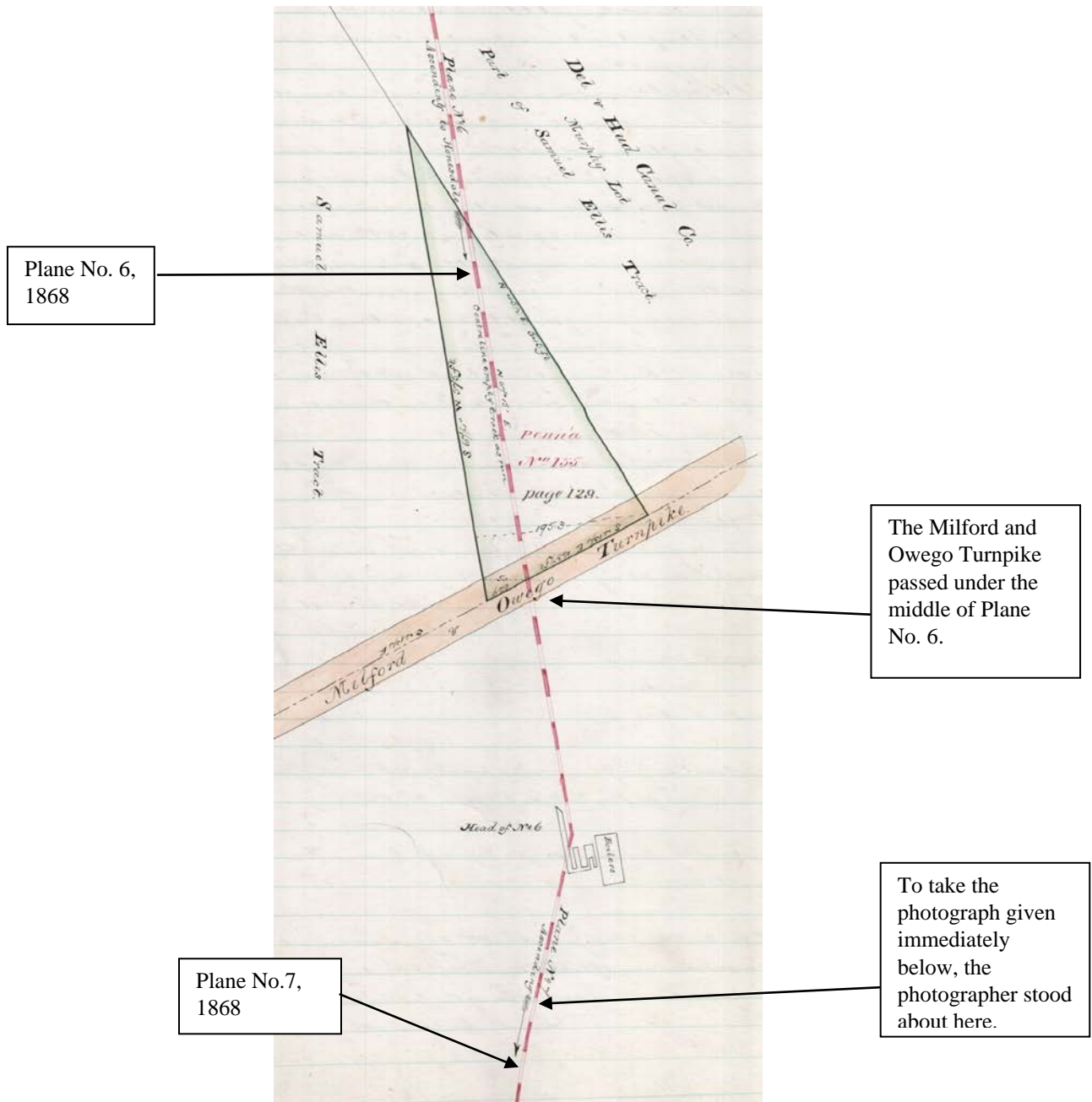
Level No. 7, 1868. Note that there was a double-tracked siding on a portion of Level No. 7, which was 1,809 feet long.

Engine house at the head of Plane No. 7, 1868

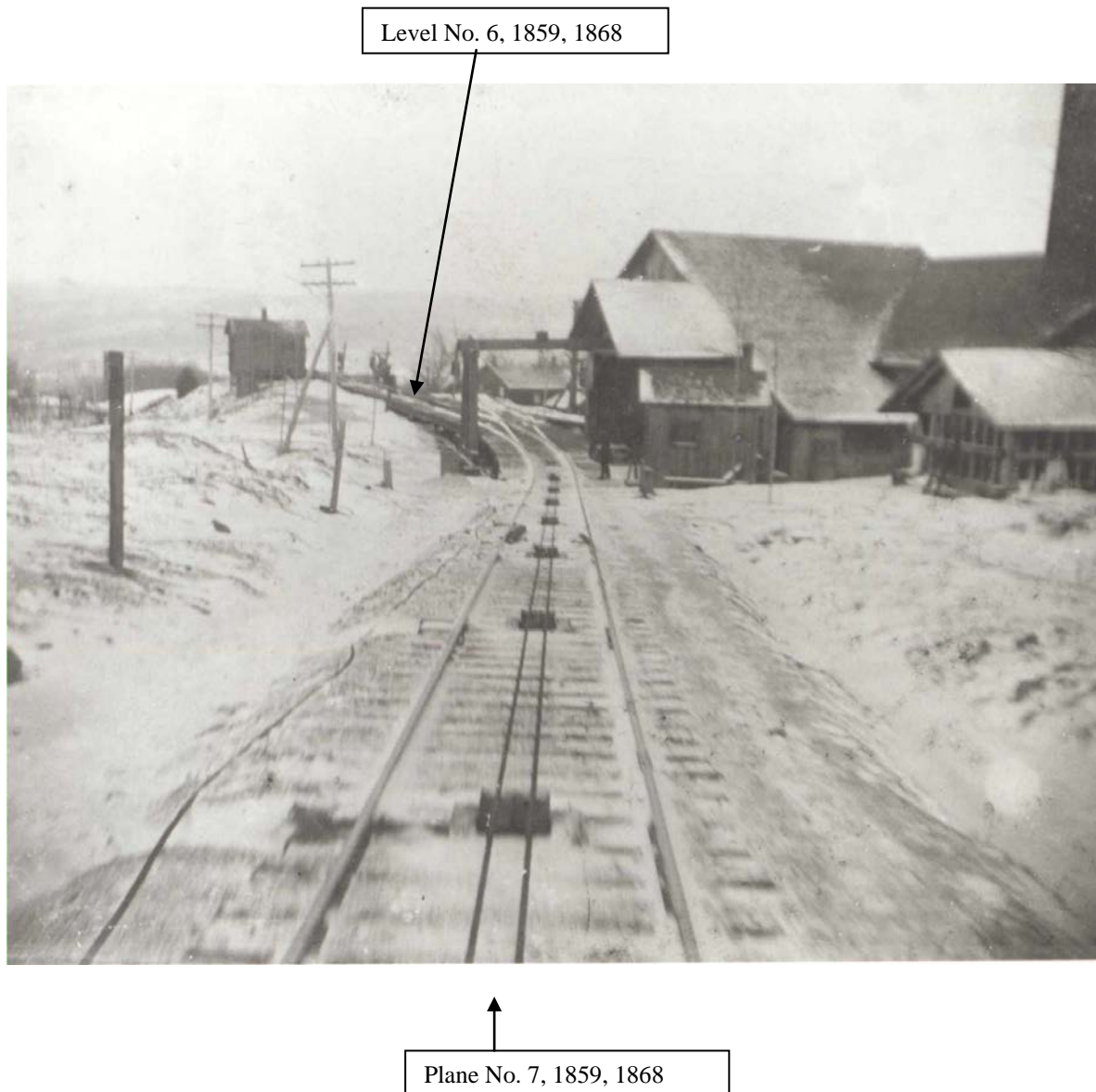


No. 7 Reservoir

Here is a view of No. 6 and No. 7 from page 128 in *D&H Deeds Luzerne I*:



View taken from No. 7 Plane (photographer standing on No. 7 Plane), looking down No. 6 level.
Photo in collection of Carbondale Historical Society.



Accidents, Facts about the Plane, and Daily Life

Another tragic death in the family of John B. Hamlin, 2d:

“Sudden Death. / We briefly noted last week the fact that John B. Hamlin, 3d, the last remaining of the family of seven children of John B. Hamlin, 2d, of this city, had been instantly killed upon the railroad on Saturday last, April 28th. / The accident occurred on No. 7 Plane, about 3 miles

up the mountain from this place. / John was at work, and engaged in picking up spikes along the plane, and at the time had an armful and stood with his back to the approaching cars, and seemed not to see them or be aware of the danger until he was knocked down by them across the rail and crushed. His age was about 12 years. / His six brothers and sisters, and his mother were within one week victims of the Spotted Fever, during its prevalence here. The case seems to be scarcely paralleled in the annals of afflicting dispensation.” (*Carbondale Advance*, Saturday, May 5, 1866, p. 2)]

Boiler explosion at No. 7:

An Explosion. / A serious explosion occurred at No. 7 Engine, on the Mountain section of the Del. & Hud. R. R. on this (Friday) morning. / The buildings are reported shattered, and smoke stack torn down. We do not hear that any person was injured. / It must cause a delay of some days to repair the damage. / LATER.—We learn that Mr. Fitzsimmons, who was working about the Fireroom at No. 7 was somewhat injured, but not so seriously but that he was able to walk home. A portion of one of the boilers, more than 20 feet in length, is said to have been carried nearly a quarter of a mile. The building is badly torn to pieces. Several men were in the Engine Room at the time of the explosion, but they marvelously escaped entirely unharmed. It is so far as we know the most serious boiler explosion that has ever occurred on the line of the road.” (*Carbondale Advance*, October 31, 1868, p. 3)

Only three days lost following the explosion at No. 7:

“Remarkable Energy. / We chronicled last week the immense destruction produced by the Explosion at Engine No. 7 on the mountain section of the Del. & Hud. R. R., three miles above town. It seemed to be generally thought that three weeks would be necessary to repair the damage. But, our people were surprised and gratified to hear the Coal cars moving briskly on Tuesday. Everything essential for moving coal was done between Friday and Tuesday—loss of only three days, instead of three weeks.” (*Carbondale Advance*, November 7, 1868, p. 3)

More on the explosion at No.7 in 1868:

“P. J. Foster* was engineer at new No. 7. On October 30, 1865 [In the Joslin/Davies text given here about No. 7, they give a date of October 30, 1865 for an explosion at No. 7. My guess is that Joslin/Davies are talking about the 1868 explosion and that the date in their text should be 1868 and not 1865.], two boilers exploded, nearly destroying the building. Hugh Fitzsimmons, the fireman, was badly hurt, but was able to be out again in a few days. In 1882, Mr. Foster was transferred to No. 3 and W. H. Vail placed at No. 7.” (*Joslin/Davies*)

* "P. J. FOSTER, engineer at No. 7 since 1861, and a resident of Carbondale since 1856, was born in Susquehanna county, Pa., in 1837, and married Lucy Sheldon, of Bradford, Pa." (1880, p. 452C)

Weather Report for April 1870, at Engine House No. 7 (*Carbondale Advance*, May 7, 1870, p. 3). A previous memorandum (perhaps more than one) was also sent to the *Carbondale Advance* by this night watchman. The idea was well received by other D&H employees. Beginning with the May 13, 1871 issue of the *Carbondale Advance*, detailed weather reports from the watchman at the Machine Shops were sent regularly to the paper.

CARBONDALE, April 5th, 1870.	
<i>Editor Carbondale Advance</i> —Dear Sir:	
I again send you a memorandum of the weather upon the Moosic Mountains, as kept by me during the month of April, 1870, at Engine House Plane No. 7, D. & H. R. Road:	
4 A. M.	6 P. M.
1—36 deg.—Clear.	44 deg.—Cloudy.
2—38 " —Rain.	42 " "
3—38 " —Clear.	40 " "
4—39 " —Snowing.	30 " —Snowing.
5—28 " "	40 " —Cloudy.
6—30 " —Cloudy.	42 " "
7—36 " "	40 " "
8—34 " —Clear.	48 " —Clear.
9—32 " "	50 " —Clear.
10—40 " "	52 " —Cloudy.
11—14 " —Cloudy.	48 " "
12—42 " —Cloudy.	42 " —Clear.
13—24 " —Clear.	52 " —Cloudy.
14—52 " —Cloudy.	26 " "
15—58 " "	62 " "
16—40 " —Clear.	20 " "
17—34 " —Fog.	44 " —Rain.
18—48 " —Rain.	46 " "
19—40 " —Cloudy.	48 " —Cloudy.
20—36 " "	48 " "
21—44 " "	50 " "
22—38 " "	52 " —Clear.
23—42 " —Clear.	22 " "
24—44 " —Clear.	68 " "
25—48 " —Cloudy.	50 " "
26—24 " —Clear.	60 " "
27—46 " "	68 " "
28—58 " "	52 " —Rain.
29—34 " "	56 " —Clear.
30—38 " "	60 " "
Snow commenced falling the morning of the 4th, and at 4 o'clock A. M., next morning (5th) it measured 15 inches.	
The 14th, 15th and 27th, were the three warmest days.	
NIGHT WATCHMAN, No. 7.	

John Brick seriously hurt in attempting to jump upon a coal train at No. 7:

1873: **“Sad Accident.** / One of the hands employed upon the mountain section of the Del. & Hud. Railroad met with a serious accident on Saturday last. In attempting to jump upon a coal train that was going up No. 7 Plane, he slipped and in falling an arm came upon the rail before the wheels of the cars which passed over it, near severing it just below the shoulder. His name is reported to us as John Brick.” (*Carbondale Advance*, January 11, 1873, p. 3)

Another accident at No.7 that took place when John Hall attempted to jump on a train in motion:

April 30, 1875: John Hall, 15 years of age, had foot crushed on No. 7 level, between Waymart and Carbondale; he was trying to get on while in motion, and his foot slipped and one wheel ran over it. (1875 *PA Auditor General Report*, p. 231)

Damaging storm in Carbondale and throughout the Northeast:

“Wednesday’s Storm. / Wednesday of this week was a remarkably wild and tempestuous day. It commenced before daylight with rain and high winds, and continued until afternoon. The wind was peculiarly wild, fitful and strong. Many of the gusts seemed to possess wonderful force and power, and while here the damages were comparatively slight, in many sections they were severe. More trees were torn down, and more buildings unroofed probably on Wednesday, than in any storm for many years. / Here a frame just erected by Mr. A. C. Hall, contractor, for a new school building in the Fourth Ward, was blown down, and the timber considerably damaged. The roof of the boiler room at No. 7 Engine, mountain division, of the D. & H. Gravity Road, was blown off. The fine ornamental moulding surmounting the front of the M. & M. Savings Bank, on Main street, was torn loose, but was secured before it fell. The magnificent spire of the Catholic Church, one of the finest in Pennsylvania, was seen to weave and vibrate considerably, but no serious damage was done. With these exceptions, the damage done here was confined mostly to the tearing off of the limbs from shade trees and shrubbery, rendering some of them quite unsightly. / In Philadelphia, over forty churches were damaged, some were unroofed, some spires blown down. In New York, in Trenton, N. J., and in Harrisburg, there were great devastations.” (*Carbondale Advance*, October 26, 1878, p. 3)

Perhaps the most severe weather in fifty years on January 3rd:

“A Severe Day. / Friday last, January 3d, was one of the coldest and most inclement days ever known in Northern Pennsylvania. The mercury in exposed situations marked at low as 16 degrees below zero, and the wind was peculiarly strong and piercing. The men employed in clearing the track of the Gravity Road, Mountain Division, suffered severely. The Superintendent informs us that twenty four of those at work, near No. 7, were frozen, some in face and ears, and

some in the feet. One man that had a belt around his waist was frozen about his body. So severe a day has seldom if ever been known here, since the railroad was opened for business, fifty years ago." (*Carbondale Advance*, January 11, 1879, p. 3)

David Wolcott first worked for the D&H as footman at 'old 7'

From this biographical portrait of David Wolcott we learn that the engineers and headmen on the Gravity Railroad had their houses and coal furnished by the D&H:

"David Wolcott, son of Frank Wolcott, was born on the family farm in Canaan Township, Wayne County, on March 4, 1841. For forty-three years and one month he worked for the D&H. In 1926, as a retired trainman, he lived with his daughter at 77 South Main Street, Carbondale. In speaking of his career with the D&H he said: 'Those were the best days of all. . . We surely did have good jobs in those days. The engineers and headmen with their houses and coal furnished, were better off than any man is today. [emphasis added] They went to work at 6:30 o'clock in the morning and stayed on duty until their work was done at night. Their pay wasn't big. Some of the engineers would draw seventy and seventy-two dollars a month, and that was about the best.' His first position on the D&H Gravity Railroad was that of 'footman at the foot of 'old 7,' between Whites and Farview. That was on August 1, 1880, and he then continued in the service until April 13, 1923, when he lost his left arm as the result of an accident while engaged as a trainman on a 'kicker' in the Carbondale yards. On the first of September, following, he was retired on pension. / After working for a year as a runner he became a head-man with Henry Vail, boss runner, and later was promoted to the position of a stationary engineer at the head of Number 6, succeeding John Correll. / Altogether, he was on the gravity road for two years and six months. Then he went to the 'Valley' road as a brakeman, reporting to John Copeland, yardmaster at Carbondale, and ran at first in freight service on trains familiarly known as 'Coal fives' and 'Coal sixes', north to Nineveh. [In the biographical portrait of William Clum, "Still a Railroad Man," that was published on pp. 3-4 of the November 15, 1926 issue of *The Delaware and Hudson Company Bulletin*, we read, on p. 4, ". . . he came to the Delaware and Hudson in 1871 and fired for 'Daddy' Slocum on the 'Coal Fives and Sixes' between Carbondale and Oneonta, and later for Fromus Dow, Charlie Vandermark, and other engineers. . ."] / Then on August 1, 1889, he was promoted to be a conductor and made his first trip from Carbondale to Wilkes-Barre and return, with Frank Ball, engineer, but later went back braking in which capacity he served on nearly every run on the division. / Two brothers, both of whom have since died, were at one time also in the employ of the Company. One, Harry Wolcott, was a conductor, and the other was William Wolcott, an engineer, who, at the time of his death, however, was in the employ of the Erie Railroad." (Biographical portrait of David Wolcott ("Liked Gravity Days Best") that was published on pages 3-4 of the January 1, 1926 issue of *The Delaware and Hudson Company Bulletin*.

Rats attack the night watchman at No. 7:

“Mr. George Chapman, night watchman at No. 7, was attacked by a large number of rats last Saturday night, one of them biting him on the nose while the others were swarming around him biting his legs and feet. He says they were very large, somewhat resembling the vicious wharf-rat, and it is supposed they came through the water pipe which furnishes water to the engines down the line.” (*Carbondale Leader*, October 20, 1882, p. 2)

Hugh Fitzsimmons had a cow that was killed on Plane No.8:

“Hugh Fitzsimmons, of No. 7, had one cow killed and another injured on No. 8 plane, last Saturday.” (“GRAVITY NOTES,” *Carbondale Leader*, May 4, 1883, p.3)

Life is Good. A former Gravity worker now studying medicine in New York City:

“Thomas Fitzsimmons, formerly one of the gravity boys, but now a successful student in a medical college in New York city is visiting his parents at No. 7. We congratulate him on his prospects for a successful life as a professional man.” (*Carbondale Leader*, June 22, 1883, p.3)

Problems with the free-range cows on the mountain:

“There is a pound up here on the hill and many of the cows that run the road are put into it. Their owners do not object so much to having their cows pounded [put in the pound], but they do object to having them shut up where they cannot get a drink of water.” (*Carbondale Leader*, July 27, 1883, p. 2)

Unfortunate accident on Level No. 7:

“Conductor Rosser’s train met with an accident on No. 7 level last Saturday morning. The following are the facts connected with it: There were 35 cars of coal standing on the main road, and the passenger train should have taken the branch. Brakeman Ed. Hubbard was standing at his post on the platform of the forward car. As he glanced at the switch he thought it was all right and did not see his mistake until the train was within about 30 feet of the coal train and then he applied the brake and slowed up the train about one-third, but it struck with force enough to throw some of the passengers from their seats, two or three being slightly but none seriously injured. This is the first accident of that kind that these trains have ever had, and when we consider the length of time they have run and the thousands of passengers they have carried safely over this road, we can but praise the men who have had them in charge. Accidents have happened on all roads, but there is no one feels worse over this than Hub. He has always been a

faithful brakeman, watching over the safety of his passengers, and the people traveling on the train have felt safe under his watchfulness. The men along the line have learned to regard him as an accommodating and obliging friend. We but echo the wish of every one that we shall see him reinstated as brakeman on this train in the near future. / WIDEAWAKE.” (*Carbondale Leader*, November 9, 1883, p. 3)

Ed Hubbard did not lose his not job because of the accident on Level No. 7:

“We are informed that Ed. Hubbard will resume his position on the gravity passenger train tomorrow morning.” (*Carbondale Leader*, November 30, 1883, p. 2)

Coal delayed for over an hour by a broken main rope on Plane No. 7:

The main rope at No. 7 broke on Tuesday last, delaying the coal for over an hour.” (*Carbondale Leader*, March 7, 1884, p.2)

Malon Pruner killed in tragic accident at No.7:

“One of those terrible accidents that cast a gloom over those employed on the gravity occurred last Wednesday morning by which Mr. Malon Pruner, foreman at No. 7, was instantly killed. An eye witness gives the following account of the accident: There were about fifty cars standing in the foot of No. 8 during Tuesday night, and on account of the snow storm which came during the night the cars had to be pulled into the foot by engine 8, but when the engine began pulling an end tie was broken which made it necessary to push the cars nearer the foot in order that the engine could get another chance to pull. About twenty of the forward cars were stretched out and the men went to the rear of them to push. They had pushed the first car about three feet and in order that he might be able to push harder Mr. Pruner stepped between the cars. As he did this a train was close to the rear of the cars that were stalled and the man who was running the train thinking that the men were out of the way bumped very hard to start the forward cars and in an instant they had fastened Mr. Pruner between the bumpers. The only words he spoke were ‘My God, I am killed,’ and in a moment the forward cars had pulled away from the others and the unfortunate man dropped dead at the feet of his companions. The lower part of his back and abdomen were crushed. Mr. Pruner had been foreman at No. 7 for several years and had been a faithful man. The men employed under him had learned to look upon him as a kind and obliging foreman. He was about 37 years of age and leaves a wife and five children, one of the little boys a cripple. The bereaved family has the sympathy of a large circle of friends in their affliction. The mandate ‘Be ye also ready,’ is again brought to our notice. No blame is attached to any one for the accident. / WIDEAWAKE.” (*Carbondale Leader*, April 4, 1884, p.2) [See “Kirt Bice” promotion, 1884, under “Racket Brook Breaker”]

The Mahlon Pruner accident report in the *Carbondale Advance*:

“Fatal Accident. / Mahlon Pruner, foreman at No. 7 on the D. & H. Gravity road, was almost instantly killed on Wednesday morning. He was in the act of removing the sling from between two trips of cars, which were being run out from the head of No. 7, when he was struck by the cars, and crushed between the bumpers. He was extricated and removed to the engine house, where he died in a few moments. He was 37 years of age, and leaves a wife and five children, who have the sympathy of a large circle of friends. The funeral services will be held at the late residence of the deceased, at No. 4, this, Friday, afternoon, at 3 o’clock. Interment at Carbondale.” (*Carbondale Advance*, April 5, 1884, p. 3)

Humanitarian act on the part of William McMullen, Wallace Dimock and the D&H:

“Kirt Bice, son of Mrs. Malon Pruner, has been promoted from Racket Brook Breaker to the foot of No. 4, where he earns eighty cents more per day. This act on the part of Mr. Wm. McMullen and Wallace Dimock is commendable, as the increase in Kirt’s wages will greatly assist his widowed mother to support the children left to her care.” (*Carbondale Leader*, April 25, 1884, p. 2)

June 1887: First Gravity Railroad passenger accident:

“ACCIDENT ON THE GRAVITY ROAD. / A Collision Seriously Injures Several Passengers—The Names. / The Gravity railroad Wednesday broke its remarkable record of having never injured a passenger in the long time that people have been carried over that line. The 3 o’clock train to Honesdale met with a collision with a coal train on No. 7 level, and a much more serious accident was prevented by the quick appliance of the brakes. / It has been the custom for the ‘runners’ on the coal trains when getting their cars out of the way of the passenger train to see that the switches are thrown, so that the passenger train can run around them into the foot without being delayed. Wednesday for some reason or other this was neglected and head brakeman Hoyle did not discover until nearly on the switch that it was not properly thrown. When he did discover it brakes were at once put on, but the coal train was so near that it was impossible to avoid the collision. The passengers in the coaches were thrown forward so violently that a number received severe injuries. They were: / N. L. Moon, of New York, visiting in Carbondale; cut in forehead. / Young daughter of Hon. C. C. Jadwin, Honesdale; cut along the face and several teeth knocked out. / Mrs. W. H. Dimmick, of Scranton, struck in the breast and slightly injured from concussion. / An infant child of Mrs. Will Wood, of Scranton; struck on seat and bruised about the face. / German, name not known, was severely bruised about the face. / Several other passengers received minor bruises by being thrown against the car seats and windows. The cars were uninjured.” (Gritman scrapbook; (*Carbondale Leader*, June 2, 1887)

Damage law suit against the D&H by Mrs. Frances Boyd Dimmick:

“Suing the D. & H. for \$30,000. / The collision on the Gravity road between this city and Honesdale which occurred last summer [the summer of 1887] will be remembered. This was the first accident to passengers on this road since the trains were first run, but several people were quite seriously hurt. Among these were Mrs. G. du Bois Dimmick, of Scranton. Yesterday papers were filed in the Prothonotary’s office by Messrs. Willard & Warren, instituting the suit of Mrs. Frances Boyd Dimmick vs. the President, Managers and company of the Delaware and Hudson Canal company. An action in trespass is brought to recover damages not exceeding \$30,000 for injuries sustained.” (*Carbondale Leader*, December 31, 1887, p. 4)

6816

D&H Ice at No. 4 and No. 7; Ice House at Farview

Ice harvest at No.7 pond:

“The D. & H. C. Co. had its ice harvested last week, excepting 200 tons for Scranton which was shipped there this week. The ice was got from the pond at No. 7, and was twelve inches thick.” (*Carbondale Leader*, January 27, 1882, p. 4)

D&H ice houses pretty well stocked:

“The D&H have their ice houses pretty well stocked with ice taken from No. 7 Pond.” (*Carbondale Leader*, January 18, 1884, p. 2)

Ice harvest discouraging:

“The ice harvest began yesterday at no. 7 and 4 ponds, but it looked rather discouraging this morning for much of a crop.” (*Carbondale Leader*, January 6, 1885, p. 1)

Ice harvest begins in earnest:

“The D. & H began their ice harvest in earnest yesterday. / Ben. Gardner, of Carbondale, is to cut 1000 tons of ice at No. 4 pond this winter. He began yesterday. / Warren Throp thinks yesterday was a cool day to go in bathing, but men who cut ice sometimes do many things they don’t wish to.” (**GRAVITY NOTES**, *Carbondale Leader*, January 20, 1885, p. 1)

One hundred tons of ice cut and loaded in one day:

“Ben. Gardner cut and loaded into cars over 100 tons of ice yesterday. / The ice on No. 4 pond is a foot thick.” (GRAVITY NOTES, *Carbondale Leader*, January 23, 1885, p. 1)

Since the light track (1868) passed very close to No. 4 Pond, a spur from the pond to the rail line would have been easy to install. We have not seen this spur on any map or in any photograph.

D&H ice harvest for 1885 completed:

“Gardner and Davis cut and shipped nearly 150 tons of ice from No. 4 pond last Friday, / The D. & H. finished their ice harvest last Saturday, having filled all of their ice houses and sent a large quantity to Morristown, N. J.” (GRAVITY NOTES, *Carbondale Leader*, January 27, 1885, p. 1)

Another ice order received:

“The D. & H. received another order for ice last week and began shipping it on Friday. It is the best ice harvested this season.” (*Carbondale Leader*, February 3, 1885, p. 1)

One hundred and eighty tons of ice cut and shipped in one day:

“Gardner and Davis cut and shipped about 180 tons of ice yesterday, the largest amount of any one day yet.” (*Carbondale Leader*, February 6, 1885, p. 1)

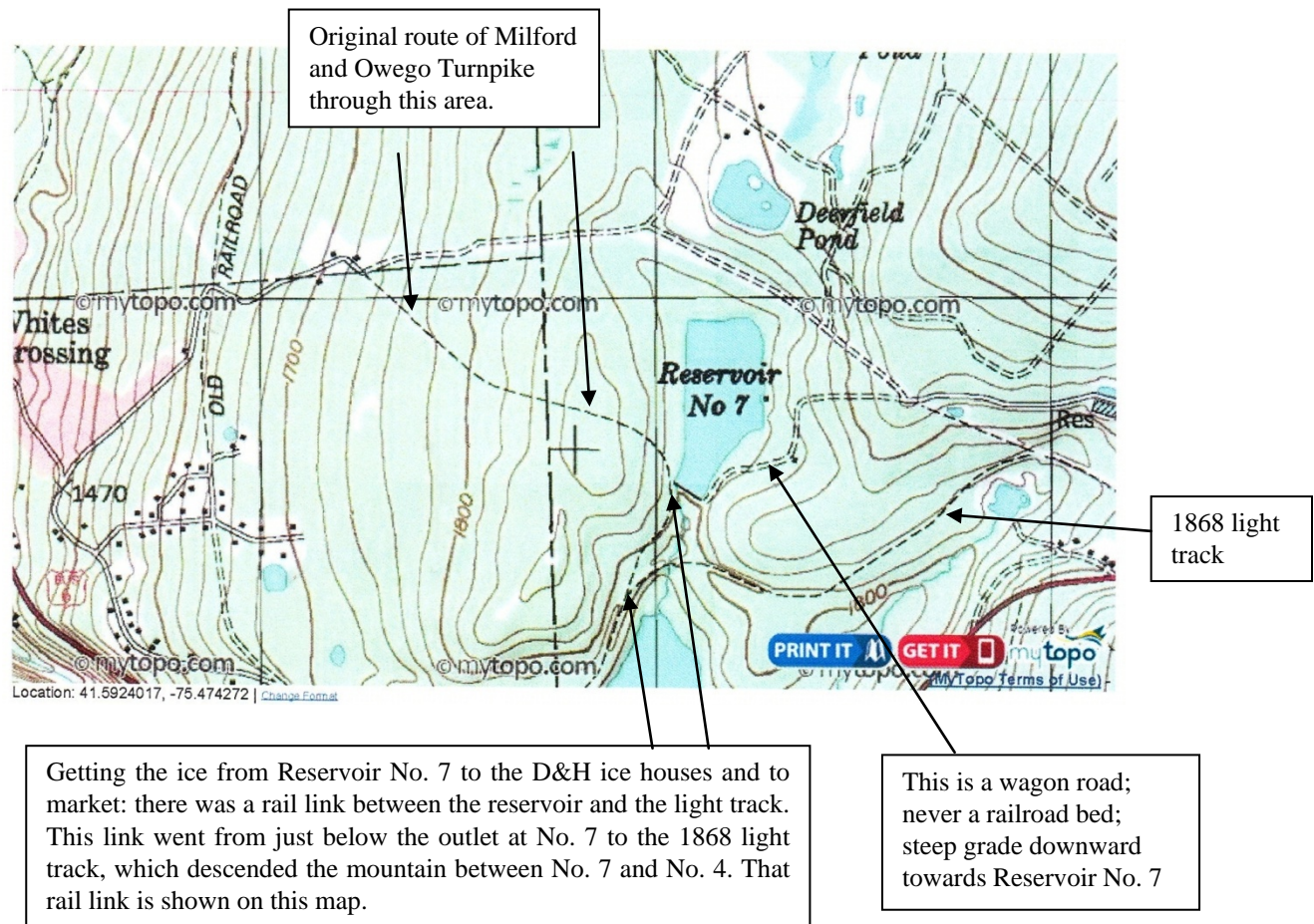
D&H ice house erected at Farview:

“The D. & H. have erected a large ice house at Farview. The ice will be gathered from No. 7 pond.” (*Carbondale Leader*, January 8, 1886, p. 4)

No indication on any known map or in any photograph as to the location of this ice house.

Rail link from No. 7 pond to the Light Track:

U. S. Geological Survey Topographical Map, Waymart, 1999 (detail)



6817

D&H Ice on the Jefferson Branch

(Carbondale to Lanesboro)

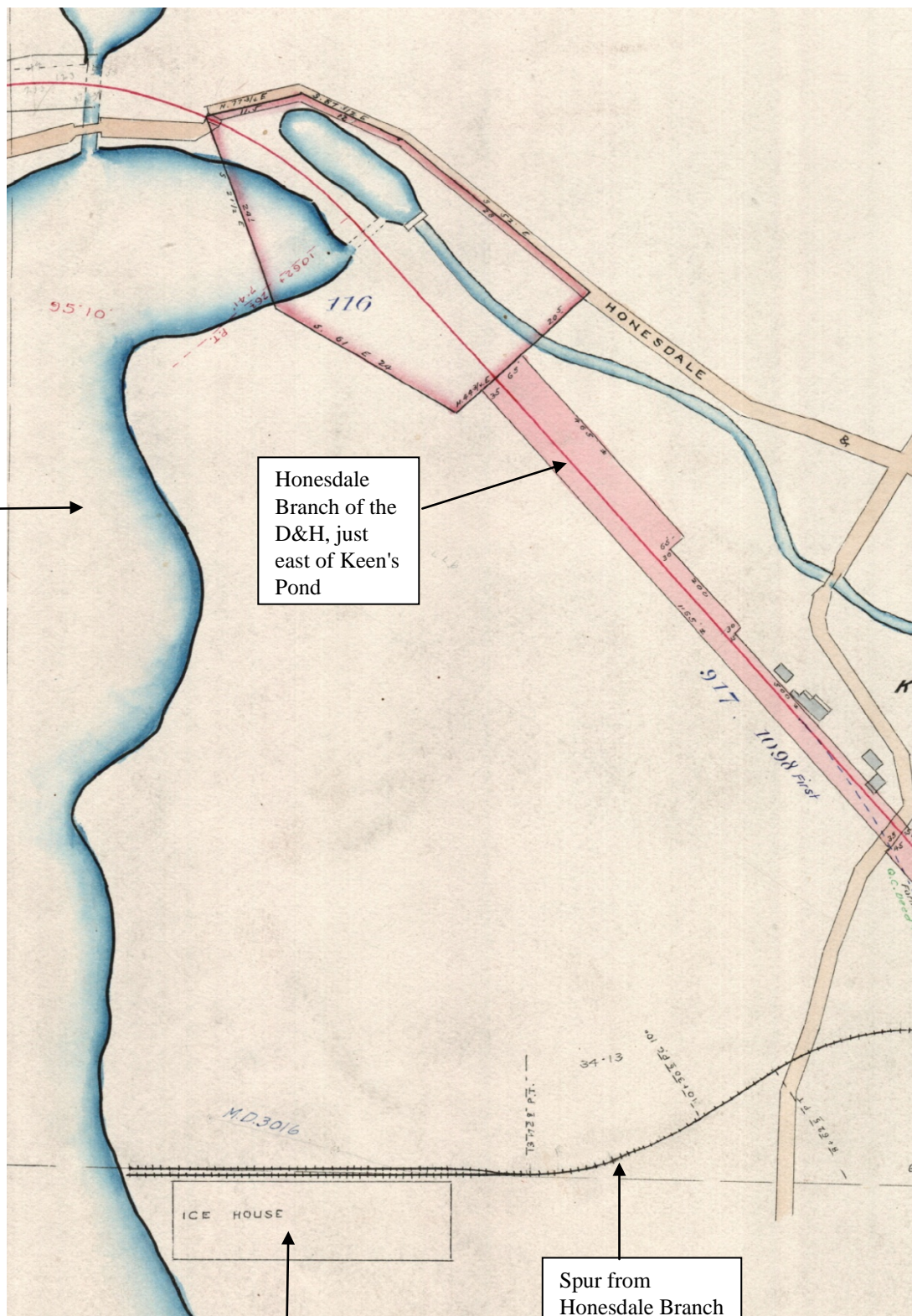
Ice industry on the Jefferson Branch: On page 28 of *Final Report January, 2002 Chapter 7 2 – Description of the Watershed, Chapter 2, Description of the Upper Lackawanna Watershed, Physical Setting of the Upper Lackawanna Watershed*, we read the following about the ice houses on the Jefferson Branch: "Railroad sidings led to the icehouses of Bone Pond (originally called Summit Lake), Lake

Lorain (Five Mile Lake), and Orson Pond. Local farmers supplemented their seasonal incomes by cutting ice and shoveling snow./ **Orson Pond** had six icehouses. Four icehouses at the end of the pond were owned by the Scranton Ice Company; two icehouses and a creamery were railroad buildings. Orson Pond yielded the most ice because it was the shallowest of the lakes and the first to freeze. / **Five Mile Lake** (Lake Lorain) had one icehouse at the end of Old Wye. / **Summit Lake** (Bone Pond) had two icehouses at the end of the New Wye. Most of the ice from Summit Lake was dispatched to Simpson Ice Company in Carbondale and Consumer's Ice in Scranton, although a fair amount also went to the creameries for icing milk cars. / By the early 1930's, mechanical refrigeration had made the old icehouses obsolete. / However, records indicate that ice was shipped out as late as 1940. Today it is easy to forget what a large business the harvesting and shipping of ice was. Not only was ice necessary at the creameries to ice the milk, and keep it cold during shipping, it was also a necessary commodity in every town and city. 'Putting up the ice' began as early as December, when the ice was at least 12-14 inches deep. The longest harvests lasted from December to April on the larger lakes, though the height of activity was in January and February. When the call of 'ice is ready' went out, crews of men, women, boys, horses, and equipment converged on the frozen waters. To reduce a large field of ice to manageable blocks required some specialized tools and equipment such as augers, spuds, pole or ice pikers, markers, ice plows, scrapers, circular and grasshopper saws, hand ice saws, and tongs. Workers were designated as field bosses, drivers, tamperers, switchers, packers, spudders, spacers, and engineers and repairmen, who kept the operation going smoothly. Ice was shipped as late as 1940 with Starlight being the last shipping point."

6817

D&H Ice on Keen's Pond

There was a spur of the Honesdale Branch of the steam line to Honesdale to the D&H ice house on Keen's Pond. That spur is shown on the two details from the 1901 steam line map given below.



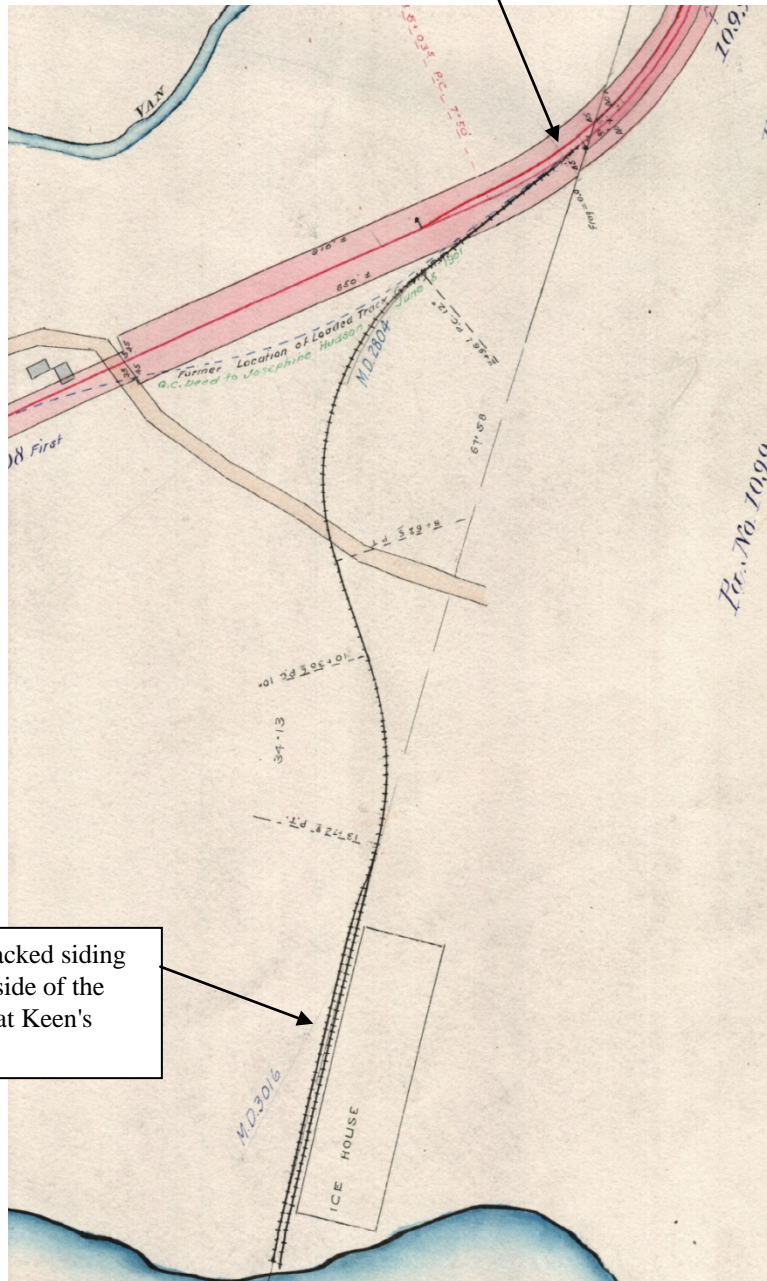
Keen's Pond

Honesdale Branch of the D&H, just east of Keen's Pond

Spur from Honesdale Branch to Keen's Pond ice operations

D&H ice house at Keen's Pond

The connection of the Keen's Pond ice spur with the Honesdale Branch



Double-tracked siding along the side of the ice house at Keen's Pond

The Lake Lodore Improvement Company focused on Keen's Pond as the locus of its ice business. In his history of the Honesdale Branch of the D&H, Stuart Dixon reports the following, p. 39, on this initiative: "Wishing to capitalize on their properties' location along the Honesdale Branch [at Stanton's Pond, Keen's Pond, and Elk Lake], the Lake Lodore Improvement Company planned to harvest and sell lake ice from the firm's inception. Although only Lodore and Keene lakes were located directly along the Branch, the company considered having a spur built to access Elk Lake. Combining the three lakes, the company owned roughly 700 acres of water surface that could supply approximately 700,000 tons of ice per harvest. The company expected to conduct at least two, and maybe three harvests per winter. At the conclusion of their first resort season [1900, at Lake Lodore], the company started construction of a large icehouse along the shores of Keene Lake, measuring 250 x 150 feet, with 10 rooms capable of storing a total of 50,000 tons of ice. The Keene Lake icehouse design incorporated the most modern features from Hudson River ice-storage buildings, structures that had been studied carefully by Percival Morris, the amusement park buildings' architect, and John Jordan, the company general manager. . ."

The spur from the Honesdale Branch to Keen's Pond and the ice house there are shown on the detail from the 1901 map given above. From the list of Siding Agreements that the D&H had with various organizations along the Honesdale Branch (see list on inside front cover of 1901 map) we see that Siding Agreement "M. D. NO. 3016" was with the "Lake Lodore Improvement Co" at Keen. The exact year in which the track to the Keen Ice House was installed is not known, but it must have been in place as soon as the ice house was completed and used—otherwise the ice from the ice house would have had to have been transported in wagons from the ice house to rail cars on the Honesdale Branch.

Huge quantities of ice were shipped from Keen's Pond by the LLIC. *Dixon*, p. 41: The Lake Lodore Improvement Company "sold [in 1909] 10,000 tons of ice to the Erie Railroad; the order required shipping 40 railcars each day for nine days from Carbondale via the D&H to the Erie's icehouse in Hornell, New York (*The Honesdale Citizen* March 5, 1909). In January 1915, the company employed 115 men harvesting ice from Keene Lake and shipped over 300 railcars of ice over the D&H to Scranton area ice merchants. . .". *Stuart Dixon* also reports (p. 41) that the Lake Lodore Improvement Company paid the D&H over \$500 in 1916 "for construction of a 'side track' at Keene Lake." This must refer to the side track along the side of the Keen's Pond ice house.

Stuart Dixon, pp. 41-42, reports some interesting statistics on the year-round ice business that originated at Keen's Pond: "Despite being somewhat seasonal, the Improvement Company either harvested or shipped ice during most months of the year. One January the company harvested and stored 30,000 tons and shipped 7,000 tons (*The Carbondale Leader* January 29, 1904). *The Honesdale Citizen* reported one February that the Improvement Company had received an order for 500 railcars of ice and would employ 50 men for about two weeks shipping the order (*The Honesdale Citizen* February 26, 1909). A March report observed that the Improvement Company needed more workers to harvest ice and offered 16 cents per hour in wages, while an April article noted that 300 tons of ice were being shipped each day (*The Carbondale Leader* April 29, 1904; *The Honesdale Citizen* March 10, 1909). One early July found railcars being filled and shipped for nearly a month (*The Honesdale Citizen* July 2, 1908). By late fall, the cycle began anew. *The Carbondale Leader* even observed that "The cutting and storing of ice in Wayne county furnishes employment every season to a large number of men and horses" (*The Carbondale Leader* December 16, 1904).

6818

D&H Stone Quarry at No. 7

The D&H stone quarry at No. 7 is not shown on any of the maps that we have examined, to date.

D&H stone quarry at No. 7:

"Theodore Geary and men are again working at No. 7 quarry. / Henry Inch has accepted a position with the quarry men." (*Carbondale Leader*, March 27, 1885, p. 1)

The D&H had a team of horses at No. 7 stone quarry:

"Isgar Haycock has been driving the company's team at No. 7 stone quarry this week." (*Carbondale Leader*, April 17, 1885, p. 1)

Horace Ferrell now works at No. 7 stone quarry:

"Horace Ferrell has accepted a position at No. 7 stone quarry." (*Carbondale Leader*, May 8, 1885, p. 1)

Hugh Boland is now working at No. 7 stone quarry:

"Hugh Boland, who has been idle for some time is handling the drill and hammer again at No. 7 stone quarry. . ." (*Carbondale Leader*, May 26, 1885, p. 1)

Work at No. 7 stone quarry suspended, but quarrymen will continue to work at No. 2:

“The work at No. 7 stone quarry was suspended on Tuesday for the winter; but the quarrymen will continue work at No. 2.” (*Carbondale Leader*, December 18, 1885, p. 4) “)

"... quarrymen will continue to work at No.2." Was there also a stone quarry at No. 2?

No. 7 stone quarry back in operation:

“The stone quarry at No. 7 is again in operation.” (*Carbondale Leader*, April 13, 1886, p. 4)

Given below are six photographs of the stone quarry at No. 7 that were taken by the author in the course of a walk on August 14, 2013 with Ed Hodorawis, who discovered the site of No. 7 stone quarry earlier this year and showed it to the author on August 14th.

Stones from the quarry were moved down a wagon road from the quarry and then loaded onto Gravity railroad cars on the light track, which passed through this area just below the quarry.

(1) the quarry as seen from the wagon road below the quarry; photo taken as Hodorawis and the author ascended the wagon road.



(2)



(3)



(4)



(5)



(6)



(7)



6819

Plane No. 8

--Plane 8 was 1,257 feet long (rise 104.15 feet)

--Level 8, or the Summit Level: 4,895 feet long (fall 43.58 feet)

“No. 8 head is 2,000 feet above tidewater.” (*Carbondale Leader*, July 20, 1883, p. 3)

Engineers at the head of the plane:

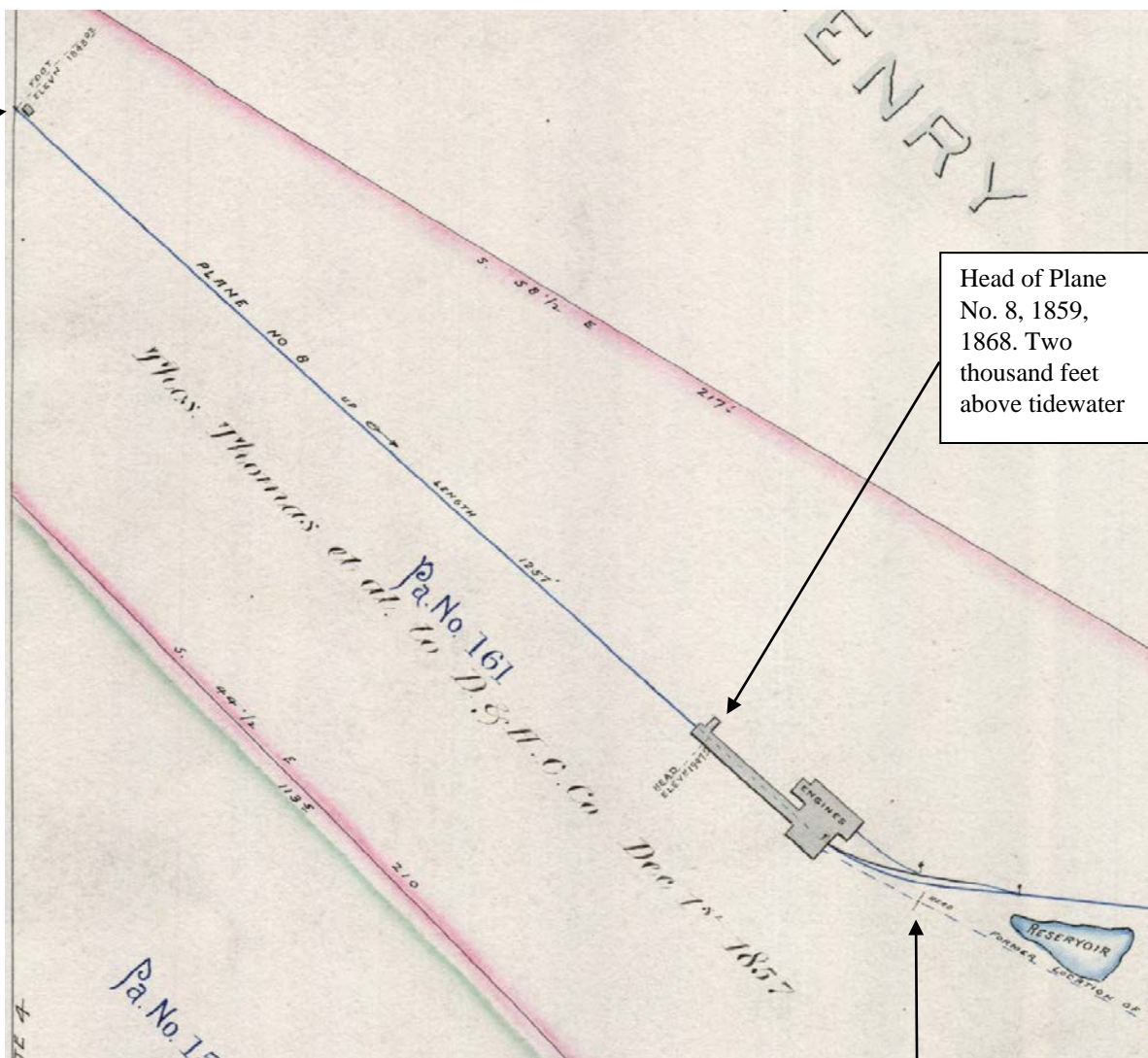
“No. 8, Farview, was manned by Orlando Foster, who was one of the first engineers on the road. After his death his son George*was given the place.” (*Joslin/Davies*)

* "GEORGE H. FOSTER, engineer at engine No. 8, was born in Canaan, Pa., in 1851, and married Leonora Chapman, of Prompton, Pa. Mr. Foster has for some time been in the employ of the Delaware and Hudson Canal Company, and at the time of his appointment was the youngest engineer on the line." (1880, p. 452C)

The return track for empties on Plane No. 8 (also on Plane No. 7) that was put in place in 1859 was no longer used/needed in 1868, when the new light track from the head of Plane 20 down to Carbondale and Archbald was put into operation. In many important ways, the return planes for empties on Planes 7 and 8 in the 1859 configuration were preliminary statements/explorations of the possibility of a completely detached light track from the head of Plane No. 20 down into the Lackawanna Valley.

1895 Gravity Railroad map volume: two details

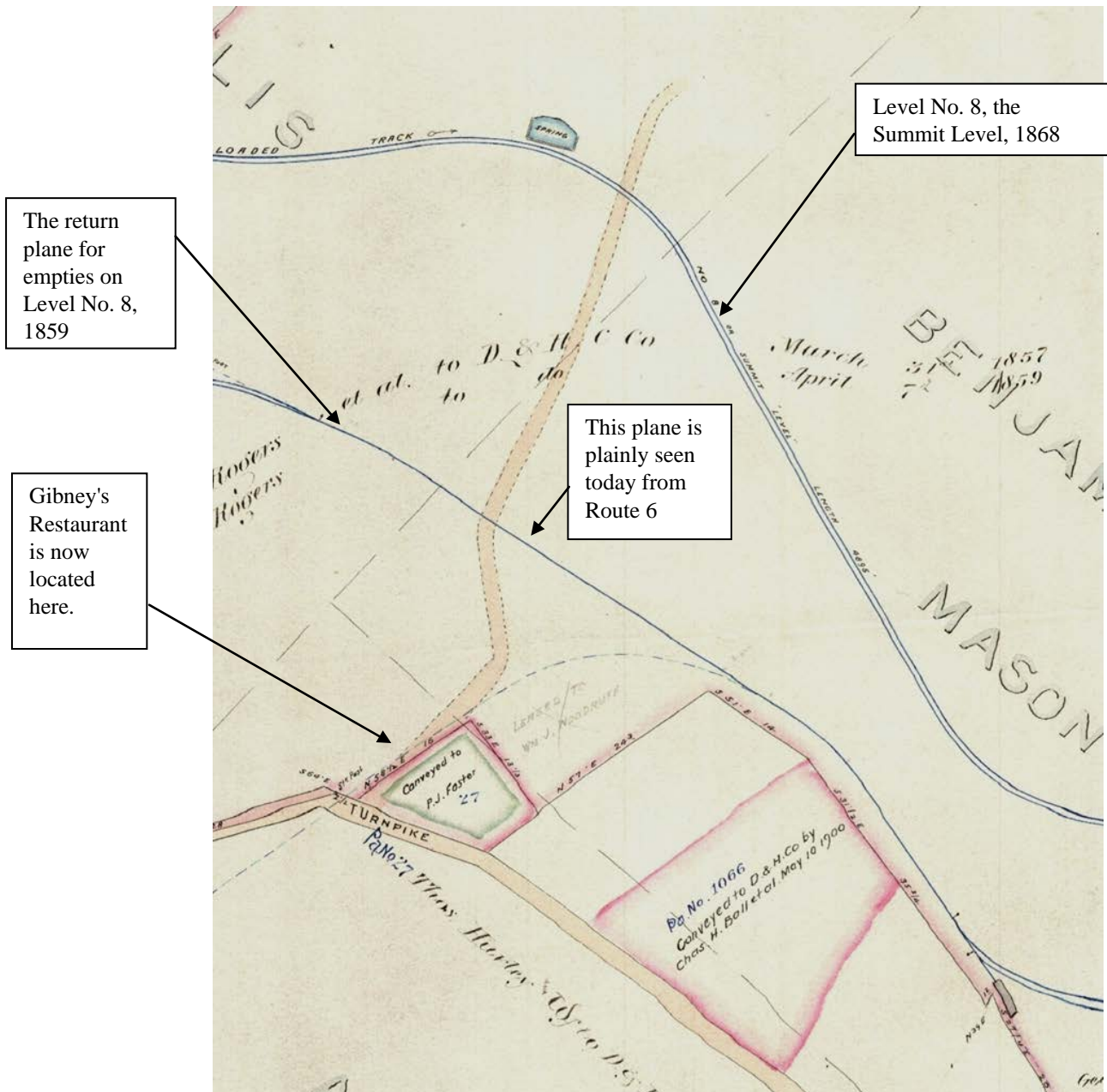
Foot of
Plane
No. 8,
1859,
1868



Head of Plane
No. 8, 1859,
1868. Two
thousand feet
above tidewater

Head of the return plane for
empties on Plane No. 8, 1859

Another view of Plane No. 8 from the Gravity Railroad map volume:



Number 8 Level was also known as the Summit Level, as we can see on the detail shown immediately above.

Accidents, Facts about the Plane, and Daily Life

Henry Sampson now headman at No. 8:

“Henry Sampson has accepted a position as headman at No. 8.” (“GRAVITY NOTES,” *Carbondale Leader*, March 30, 1883, p. 3)

Switchback for the use of fire-room coal at the head of No.8:

“Wallace Case is putting in a switchback at No. 8 for the use of the fire-room coal.” (*Carbondale Leader*, April 6, 1883, p. 3)

R. L. McMillen is the only man with one arm who works on the Gravity:

R. L. McMillen is the only man with one arm that handles cars on the road, and yet there are but few men on the gravity with a better record as a train runner.” (“GRAVITY NOTES,” *Carbondale Leader*, April 20, 1883, p. 3)

Gravity employees watch balloon ascension at Honesdale:

“Some of the boys say they would like to have gone up in the balloon at Honesdale on the Fourth, but for our part No. 8 is high enough in the air for us. / The people around No. 9 had a good view of the balloon when it ascended from Honesdale on the Fourth.” (*Carbondale Leader*, July 13, 1883, p. 2.)

Fred Shaffer in accident on Plane No. 8:

“Fred Shaffer, of No. 8 foot, was severely injured on Saturday last. He jumped on a loaded trip as it started up the plane, to let off a brake, and, in some manner his foot slipped and caught on the spoke of the wheel under the truck. One toe was broken, and his foot otherwise cut and bruised. He will be laid up for some time, but he can consider himself fortunate that it is not worse.” (*Carbondale Leader*, July 27, 1883, p. 2)

R. L. McMillen has a canary in his shanty at No. 8:

“R. L. McMillen is getting high-toned. He has a canary bird in his shanty at No. 8.” (*Leader*, August 3, 1883, p. 2)

Shreehan attends Democratic convention held at Honesdale:

“George Shreehan, of No. 8 foot, was one of the delegates from Canaan township to the democratic convention held at Honesdale, on Monday. He went to do his duty to the men that elected him, and, notwithstanding the opposition he had to encounter, he did his whole duty nobly.” (*Carbondale Leader*, September 7, 1883, p. 3)

Wonacott was a delegate to the Republican convention at Honesdale:

“Richard Wonacott, foreman at No. 8, was one of the delegates from Waymart to the republican convention held at Honesdale last Tuesday.” (*Carbondale Leader*, September 14, 1883, p. 3)

Almost five hundred trips up No. 8 on Tuesday:

“494 trips of coal passed up No. 8 plane on Tuesday.” (*Carbondale Leader*, December 19, 1884, p. 2)

Intense cold weather slows the movement of cars:

“It took a train of loaded cars one hour and fifty minutes to run from No. 8 to No. 9 last Saturday morning on account of the intense cold weather [20 degrees below zero at Waymart on Saturday morning]. The distance is less than one mile.” (*Carbondale Leader*, December 23, 1884, p. 2)

Passenger cars pulled from No. 5 to No. 20 by the Major Sykes* during the time that new boilers were being installed at No. 8:

“No. 8 was a busy place last week, the old boilers having played out. A large force of men were at work putting in new ones. The passenger trains were pulled from No. 5 to No. 20 with the Major Sykes, O. Histed engineer, and Morris Bunnell fireman. No. 8 was doing quite well yesterday with four boilers, four more are to be put in as soon as possible.” (*Carbondale Leader*, December 30, 1884, p. 1)

*On Level No. 5 the passenger cars were sent through the runaround there onto the light track (Level No. 20) and then pushed up-grade by the Major Sykes to the head of Plane No. 20, and then sent down the mountain to Waymart and on into Honesdale.

Preparing for the new boilers at No. 8:

“Henry Lippert, Ed. Inch, William Hunter, Hiram Inch, Wallace Case and men under the direction of Mr. Wm. McMullen, are at work at No. 8 getting ready for the new boilers. . .” (*Carbondale Leader*, January 2, 1885, p. 1)

Faulkner oils the pulleys from No. 28 foot to the head of No. 8:

“Frank Faulkner now oils the pulleys from No. 28 foot to the head of No. 8.” (*Carbondale Leader*, January 13, 1885, p. 1)

New engine and boiler house at No. 8 will soon be finished:

"The new engine and boiler house at No. 8 will soon be finished. Wm. McMullen is giving the work his personal attention and when finished it will be one of the best buildings on the road." (*Carbondale Leader*, April 14, 1885, p. 1)

Two feet of snow at No. 8:

"The late storm was the worst in years. The snow was fully two feet deep at No. 8. The passenger train due at Carbondale at twenty minutes past four p. m. did not reach the depot until long after midnight on Tuesday." (*Carbondale Leader*, November 27, 1885, p. 4) [first "Mountaineer" column, I believe]

James Brady dies of an inflammation of the stomach:

"Sudden Death of a Railroader. / James Brady, a workman at the head of No. 8 plane, Gravity road, went to work as usual last Friday, but during the morning he was taken ill and was compelled to go home. Dr. Niles, of Waymart, was called, who pronounced it a bad case of inflammation of the stomach. Brady grew gradually worse until three o'clock Sunday afternoon, when he died. He was 37 years of age, and leaves a wife and three children. The remains will be interred in the new Catholic cemetery to-morrow afternoon. (*Carbondale Leader*, April 12, 1887, p. 4)

Engineer Foster's son sustains foot damage in accident:

"Ray Foster, son of Engineer Foster of No. 8 met with an accident this morning which will probably result in the loss of his big toe on the right foot. Roy has been employed as water boy at No. 4 stone quarry and has been in the habit of riding from No. 9 down to his work every morning on the first train. As he went to get off this morning his toe got caught in the wheel and was pretty badly ground before he was released from his perilous position. Roy has got the sand. He says that the toe won't keep him in the house but a few days." (*Carbondale Leader*, July 12, 1892, p. 4)

6820

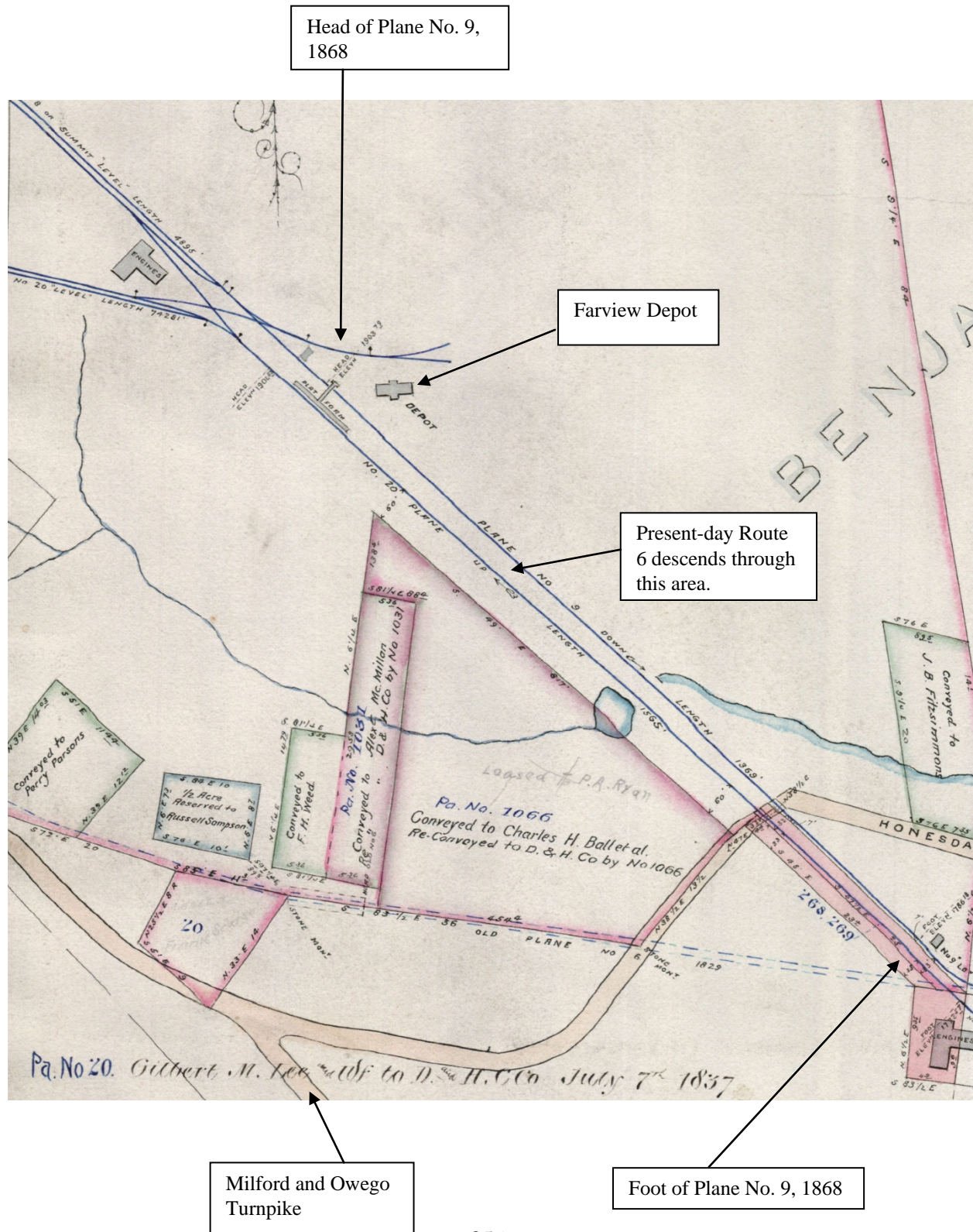
Plane No. 9

--Plane 9 was 1,369 feet long (fall 117.61 feet)

--Level 9: 242 feet long (4.97 feet)

"Altitudes Again. / We are indebted to O. D. Shepherd, Esq. Chief Engineer of the D. & H. C. Co. of this city, for the following elevations, omitting fractions, above tide water, of various points on the Gravity R. R. of the Company: Head of No. 9 Plane, Summit, 1947." (*Carbondale Advance*, September 17, 1870, p. 3)

1895 Gravity Railroad map volume:
Plane No. 9: a downhill plane



W. E. Anderson's excellent summary of changes in 1868 configuration:

"The increasing development of the company's mines taxed the capacity of the railroad and, in 1866, the three double track planes between Farview and Waymart were replaced by four single track planes. Numbers Nine to Twelve, for lowering the loaded cars and three single track planes, Numbers Eighteen to Twenty, for raising the empties. Between 1866 and 1869 planes Four to Eight were made single track for upgrade movement only and a location for gravity movement of the returning light cars was developed from the head of Number Twenty at Farview, around Shepherd's Crooks to a connection with the Blakely level. The loaded and light car movements were now entirely independent of each other and the capacity of the road was greatly increased. No further changes, except of a minor character, were made until the planes were abandoned in 1899." W. E. Anderson

Moving cars down through Planes 9-12:

In running loaded cars down Planes 9-12, the sling is attached to the rear car, and the cable and train runs down the incline by its own gravity, but its speed is regulated by a large fan, whose atmospheric resistance is very great, situated at the head of the train.

Accidents, Facts about the Plane, and Daily Life

Stranger killed on No 9 in 1873:

"Fatal Accident. / A fatal accident is reported to have happened on No. 9 Plane on the Waymart side of the mountain, on Thursday. While a stranger was going down the plane upon the cars, three cars became disconnected at the Head, and rushed down against the train upon which he was riding, crushing him with the cars." (*Carbondale Advance*, November 1, 1873, p. 3)

Members of R. R. Library to meet at George Berry's house near No. 9:

"The additional members of R. R. Library will meet at Geo. Berry's house, near No. 9, July 7, 7 ½ P.M., to elect additional directors. The directors of the Mechanics' Library, organized 23d inst., by electing Jas. Dickson president and Samuel Bryant secretary. Library open every Saturday evening from 7 to 9, in the school directors' room, City Hall. A full attendance of members is desired this week." (*Carbondale Advance*, July 1, 1876, p. 3)

Frederick Buckland run over on Plane No. 9:

1882: "On Tuesday evening of this week Fredrick Buckland, employed on the repairs of track on the Waymart section of the gravity, was run over by a trip of cars that were descending No. 9 plane. He was shoveling snow from the loaded track, and a trip of light cars passing at that moment on a track running parallel with the one he was on, prevented his hearing the approaching cars and he was knocked down. The whole trip passed over him, crushing his legs and arms badly. He was immediately taken to his home at Waymart and died within an hour. He was a general favorite with the railroad boys and his loss will be mourned by his companions." (*Carbondale Leader*, December 29, 1882, p. 2)

William Price now headman at Plane No. 9:

"William Price has been promoted to the position of headman at No. 9." (*Carbondale Leader*, May 18, 1883, p. 3)

C. W. Miller has a new house:

"C. W. Miller, wheel-runner at No. 9, moved into his new house last Saturday." (*Carbondale Leader*, July 13, 1883, p. 2)

Fancy Wedding at No. 9: Jennie Weed to Frank Cory:

"The residence of Mr. R. E. Weed, of No. 9, was the scene of rejoicing on Wednesday evening occasioned by the marriage of their daughter, Miss Jennie, an amiable and accomplished young lady, to Mr. Frank Cory, son of Mr. Walter Cory, of No. 11, the Rev. F. C. Gendall, of Nanticoke, officiating. The happy couple started on an extended wedding tour after the ceremonies. We are personally acquainted with the contracting parties and bespeak for them a happy life. The following is a partial list of the presents received: Mr. R. E. Weed, check for \$100; Mrs. Hiram Hudson, silver fruit stand; Eliza Hudson, silver butter dish; Mr. and Mrs. F. H. Weed, silver cake basket; F. G. Weed, elegant parlor lamp; Eddie Weed and Mr. and Mrs. Cory, two silver casters; Mrs. R. E. Weed, one dozen silver knives and forks; Mrs. E. E. Weed, two silver butter knives; Mrs. Freeling Brundage and Miss Lillie Hines, two sets of glass dishes; Mr. and Mrs. Brundage, six goblets and large glass pitcher; Mrs. Fred. Topping, white counterpane; Mr. Fred. Topping, wash bowl and pitcher; Mrs. Brundage, one dozen napkins; silver top salt stand and many other beautiful and useful presents." (*Carbondale Leader*, April 4, 1884, p. 2)

Gravity folks sleigh ride to Greenfield:

“A party of ten couple from No. 9 enjoyed a sleighride to Greenfield last Friday night, returning at 6 o’clock Saturday morning. They had a good time while there, but they had a rough time going and coming, on account of the drifts.” (*Carbondale Leader*, March 17, 1885, p. 1)

Sixteen below zero at No. 9:

“The thermometer registered 16 degrees below zero at No. 9 last Wednesday morning.” (*Carbondale Leader*, March 20, 1885, p.1)

Shaft now being sunk at No. 9:

“Under the supervision of Michael McCann and Milo Cordner a shaft is being rapidly sunk at No. 9 near Farview. The boys are working like beavers themselves as they say help is scarce.” (*Carbondale Leader*, September 1, 1892, p. 2)

Many of the planes on the Gravity Railroad were distinct communities unto themselves. At Plane No. 9, for example, there was a school.

“School will commence at No. 9 next Tuesday.” (*Carbondale Leader*, April 27, 1883, p 3)

“The teacher of No. 9 school being sick there has been no school there this week.” (*Carbondale Leader*, May 11, 1883, p. 3)

“No. 9 school house as filled with people last Wednesday evening, to witness a magic lantern exhibition. It was said to be first class.” (*Carbondale Leader*, June 15, 1883, p. 3)

“Supt. Larabee, of Wayne county schools and Prof. Dooly, principal, of Waymart Academy, paid a visit to No. 9 school on Tuesday last.” (*Carbondale Leader*, August 3, 1883, p.2)

“School commenced at No. 9 last Monday, Miss Edith Hayl, of Prompton, teacher.” (*Carbondale Leader*, May 2, 1884, p. 2)

“A Sunday school was organized at No. 9 last Sunday with the following list of officers: Mrs. R. E. Weed, Superintendent; J. E. Ketchum, Assistant Superintendent; George H. Foster, Secretary; R. E. Weed, Treasurer. In the selection of Mrs. Weed for Superintendent the people have done well, for she is a lady whom all the children love and she knows just what to do to please them and make them interested in Sunday school work. We expect to see this school prosper. They will meet in the schoolhouse at No. 9.” (*Carbondale Leader*, April 7, 1885, p. 1)

“Miss Maud Gaylord, of Waymart, is teaching school at No. 9.” (*Carbondale Leader*, April 13, 1886, p. 4)

End of material on school at No. 9

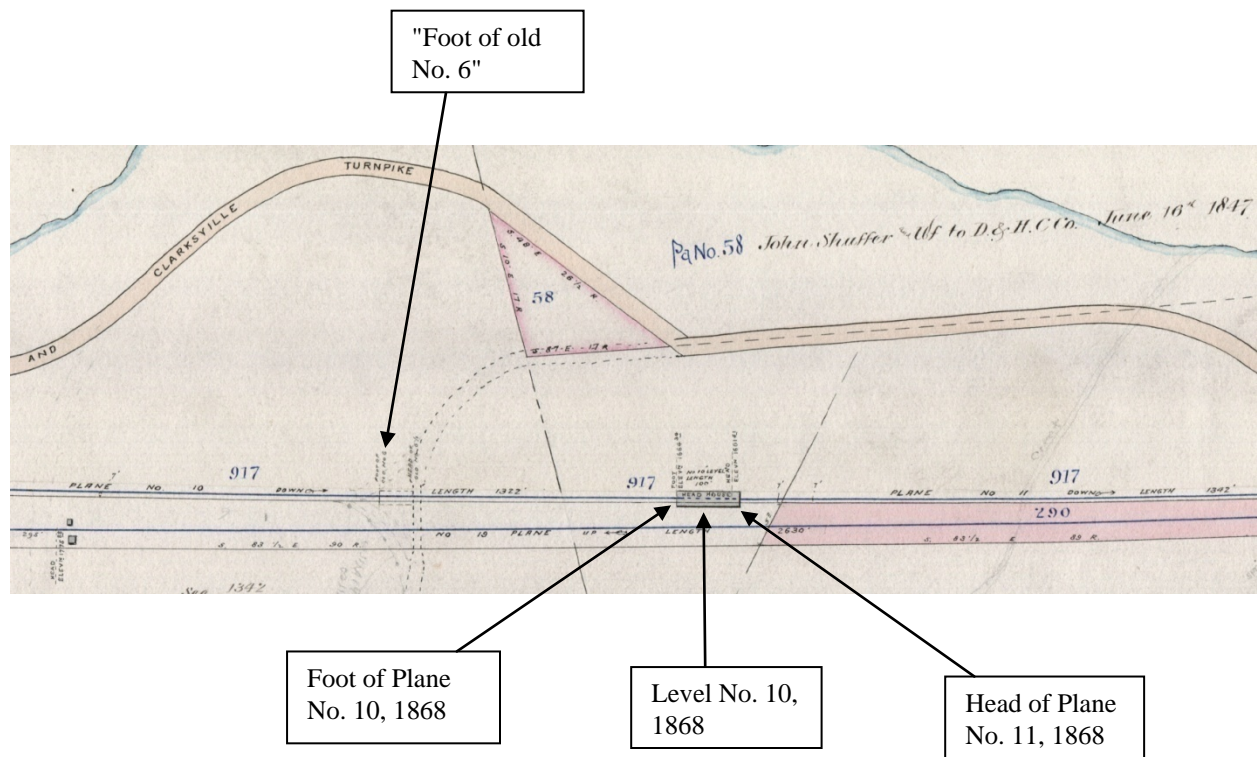
6821

Plane No. 10

--Plane 10 was 1,320 feet long (fall 116.87 feet)

--Level 10 was 100 feet long (fall 2.82 feet)

1895 Gravity Railroad map volume:
Plane No. 10 and Level No. 10:



Accidents, Facts about the Plane, and Daily Life

Close call on Plane No. 10:

“On Monday afternoon as the freight train on the D. & H. C. Co.’s gravity road was leaving the head of plane No. 10, the man who had charge of the work missed hooking the rope to the train, and it rushed with great speed down the track of the plane. A number of passengers were on the cars, who, of course, became very much frightened. A trap near the head of the plane threw the cars off the track, very little damage was done, and no one was hurt. The accident caused a delay of nearly two hours.” (*Carbondale Leader*, November 11, 1876, p. 3)

Pully car experience at No. 10:

“George Perkins of No. 10, and John Gunsauls, of the summit, had a pully car experience last Monday night, one car run into the other smashing both to flinders, but the men escaped with a few scratches and a bad fright. Boys don’t go so fast.” (*Carbondale Leader*, November 2, 1883, p. 3)

John Gunsauls heads for California:

“John Gunsauls, of the Summit, is soon to start for California where he expects to do much better than working on half time. We wish him health and prosperity in his undertaking.” (*Carbondale Leader*, February 22, 1884, p. 2)

6822

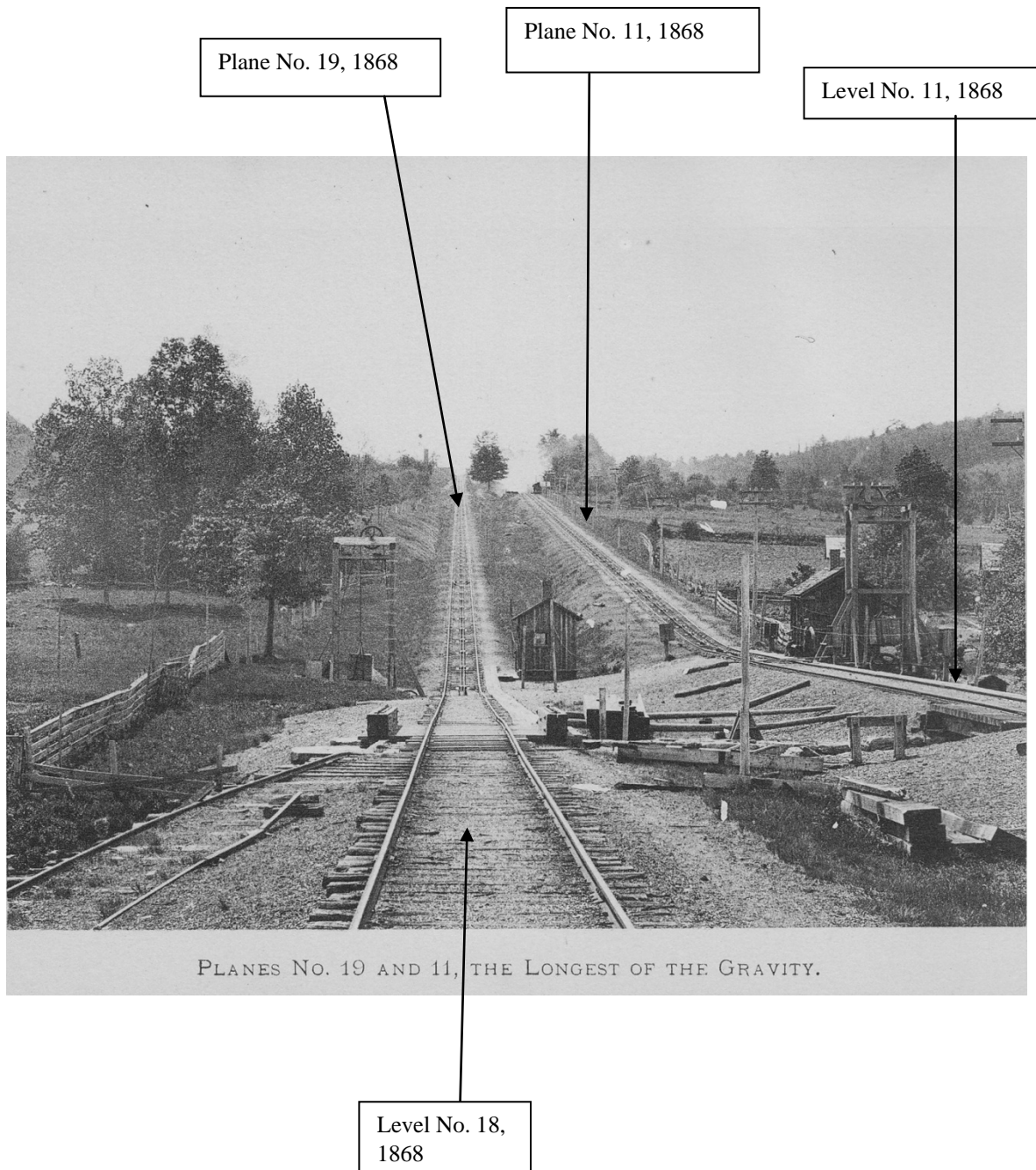
Plane No. 11

--Plane 11 was 1,342 feet long (fall 114.75 feet)

--Level 11 was 1,193 feet long (fall 14.48 feet)

Plane 11 was about three-fourths of the way down the mountain from Farview.

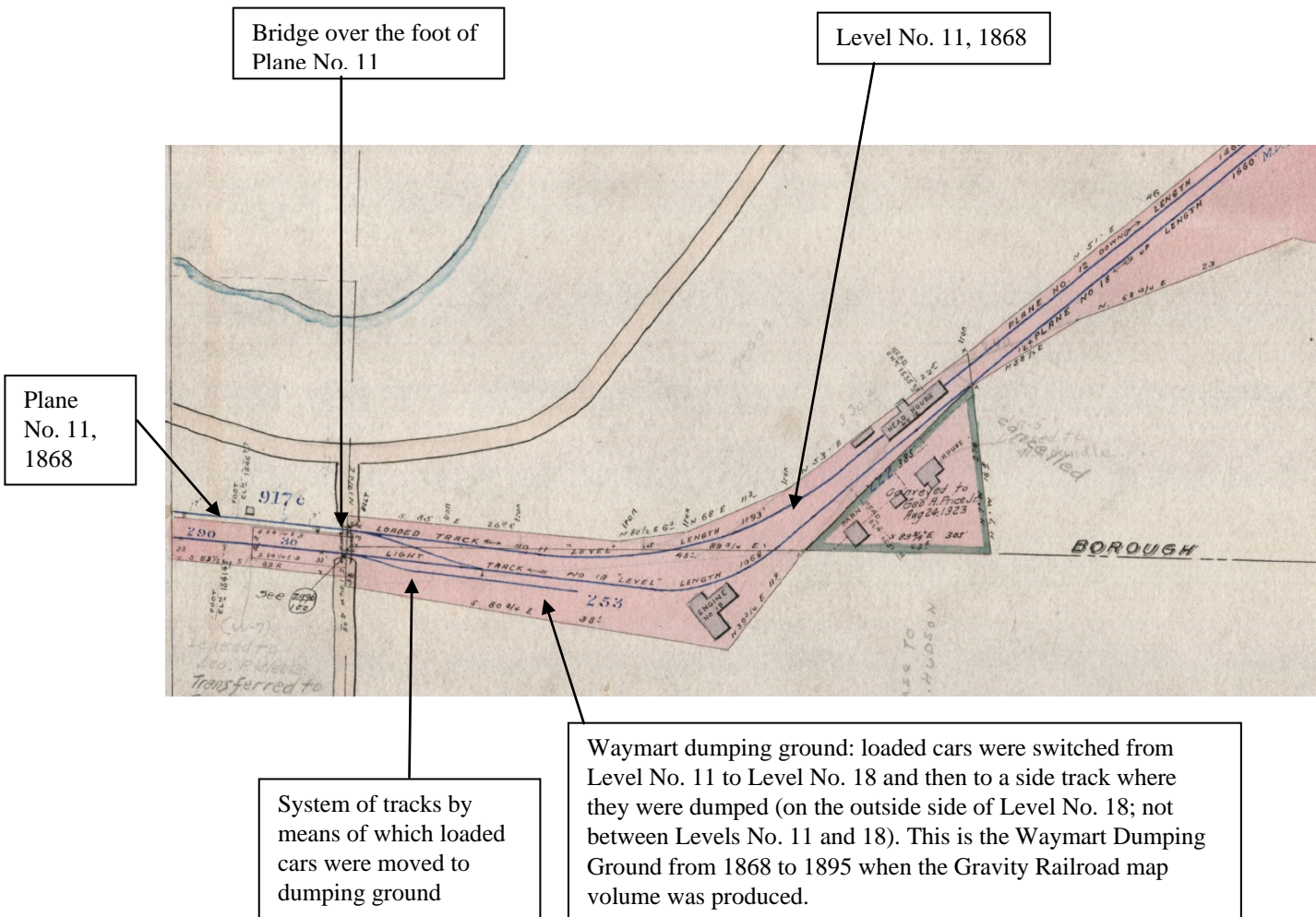
Hensel view of Planes 19 and 11:



L. Hensel, No. 1118: "View down the Valley from Head No. 11 Plane" (One half of the stereo card, in the collection of the Carbondale Historical Society). If we are looking down the valley from the head of Plane No. 11, then Plane No. 19 is on the right (not seen here).



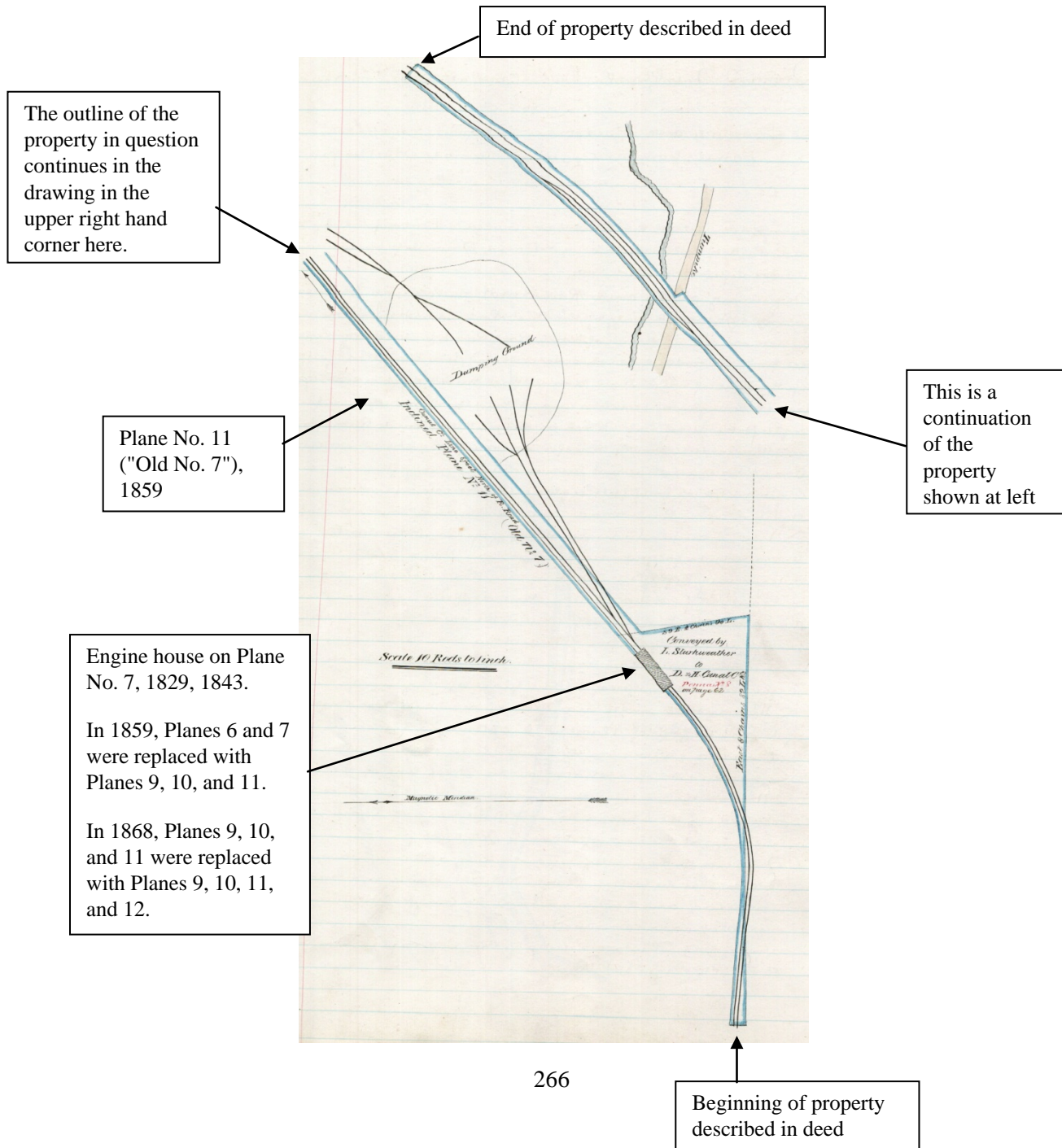
Plane and Level No. 11 from the 1895 Gravity Railroad map volume:



On the above map, drawn by W. E. Anderson, the very best source of information on Gravity Railroad specifics, places the dumping ground, in 1895, on the outside side of Level No. 18. There would not have been enough room between the tracks (Levels 11 and 18, for example) for a decent sized dumping ground.

In the *D. & H. Deed Book – Wayne*, on page 6, there is a map that illustrates the deed on page 5, dated November 20, 1829, between Leonard Starkweather and wife and The Delaware & Hudson Canal Company. On that map, Old No 7 (later to become Plane No. 11) and the Dumping Ground at Waymart are shown. Four tracks to dump; two tracks to re-load: That map is given below.

The Waymart Dumping Ground shown on the Starkweather map is the Waymart Dumping Ground from 1847 to 1868 (when Planes 18, 19, 20 were installed, and when the 1859 Planes 9, 10, and 11 were replaced with Planes 9, 10, 11, and 12).



L. Hensel, No. 1116: "Waymart, seen from Old Dumping Ground."

Note: "Old" here means "former."



6823

The Waymart Dumping Ground

The exact location of the Waymart Dumping Ground changed (but not by much) over the years.

When the first Dumping Ground was established in 1847(see James Archbald note below), the Dumping Ground was to the right of Plane No. 7, as shown on the Starkweather map shown above. In 1859, when Planes 6 and 7 (from 1829) were replaced with Planes 9, 10, and 11, the Dumping ground remained in more or less the same place.

In 1868, when Planes 9, 10, and 11 were replaced with Planes 9, 10, 11, and 12, and Planes 18, 19, and 20 were installed, the dumping ground was moved to the outside side of Level No. 18, as shown on the 1895 map detail from the Gravity Railroad map volume.

Here is some background information on the Waymart Dumping Ground:

In his report to President John Wurts of 1847, James Archbald states: “There is a short piece of road from foot of No. 6 to head of No. 7 the next descending plane, as also that plane, remaining as at first constructed. Some additions and improvements to the machinery at the head of this plane is all that is required here. It is at this point of our road where we are making [in 1847] preparation to deposit coal whenever the ground at Honesdale becomes filled up or when deep snows make it difficult and expensive to keep our road open the whole length.” (emphasis added)

The Dumping Ground referred to above is where coal was unloaded and temporarily warehoused at Waymart. This dumping ground was established in 1847, and was no longer used as such in 1879 when Hensel took his photograph titled “Old Dumping Ground”

At the time that Hensel produced Stereograph Card No. 1116, 1879, shown above, the “Dumping Ground was no longer a reality, since in the title of that card the Dumping Ground is referred to as the “Old, i. e., “former” Dumping Ground.” When the “Old Dumping Ground” ceased to be used as such (before 1879) is not yet known. A photograph of coal storage piles at Waymart is not known to exist.

Statements in print about coal dumping/storage in piles at Waymart are rare.

In the February 23, 1855 issue (p. 3) of the *Carbondale Transcript and Lackawanna Journal*, we read:

“The Cars on the Del. & Hudson Company’s works will stop running on Wednesday, 28th inst., and will not resume operations before the middle of April. We understand the Company have a vast amount of repairs and alterations to make on their road, contemplated for some time past; as well as a more than sufficient body of coal at Honesdale and Waymart, (emphasis added) with what will be mined next summer, to supply the full capacity of the Canal for transportation.”

Also, in the “Statement of the business of the Delaware and Hudson Canal Co. for the year ending March 1, 1855” we read: “Coal on hand, being principally in pile at Honesdale and Waymart, and in boats on line of Canal.....\$184,092.00.” (*Carbondale Transcript and Lackawanna Journal*, April 6, 1855, p. 2)

In 1855, we learn from the above newspaper articles, that coal was being dumped/stored at Waymart.

In early July 1862, coal was apparently not being dumped at Waymart. This we know from the clipping given immediately below, from which we learn that the D&H temporarily stopped mining and shipping coal at that time because (1) the repairs to the D.&H. Canal then being made were taking longer than expected and, (2) because the Honesdale coal pockets were full.

“The Coal Business. / The repairs upon the Canal of the D. & H. C. Co., are taking more time than was at first expected. It is now expected to be ready early next week. The amount of coal stored at Honesdale has reached its maximum, and the Company has been obliged to discontinue mining and sending it over the Railroad until shipments can be made on the canal.” [emphasis added] (*Carbondale Advance*, July 12, 1862, p. 3)

In early April, 1863, however, with the coal pockets at Honesdale nearly filled, the D&H did not stop mining and shipping coal over the Gravity Railroad. Rather, they dumped/stored coal at Waymart:

“Coal Shipments. / It will be seen by reference to the published statement that the D. & H. C. Co. have already mined and shipped over the railroad to Honesdale upwards of 200,000 tons of coal the present season. This is a larger amount than was ever before forwarded, we believe, this early. The pockets at Honesdale, we learn, are nearly filled, and the coal is now being dumped at Waymart. Some difficulty is experienced in emptying the cars there fast enough to prevent obstruction. (Emphasis added) / We are glad to learn that miners and others in the employ of the Company have received an advance in wages of about 15 per cent.” (*Carbondale Advance*, April 4, 1863, p. 2)

Twenty thousand tons of coal stored at Waymart:

“The Delaware and Hudson Canal is now in full operation. They have 210,245 tons of coal piled here [Honesdale] and about 20,000 tons at Waymart. It is the intention of the Company to do a largely increased business the coming season.—*Honesdale Republic*.” (*Carbondale Advance*, April 30, 1864, p. 2)

Accidents, Facts about the Plane, and Daily Life

Thomas Mangan killed in probable pulley car accident:

“A young man named Thomas Mangan was found dead last Sunday morning at the head of No. 11 plane, having lain there all night with the back of his skull crushed in. He was a laborer in James Copeland’s gang and boarded with his brother in Waymart. To make the journey over the mountain easier and faster he used a pulley-car like all railroad men who have any distance to go. By the use of the pulley-car a man can ride both ways on the plane. It consists of two flanged pulleys fastened together in the form of a truck and runs on one rail, but is balanced by a board reaching over the ropes and supported on the other rail by a small pulley. There is also a brake which may be applied to the larger pulleys. A remarkable rate of speed is attained by these cars in the distance of a plane. The men generally let them run at a reckless pace and it is supposed while the young man was on No. 10 plane the brake either broke or became unmanageable and the car rushed down the plane with great velocity, on through the foot and jumped the track near the head of the next plane throwing him off with the above result. The funeral was held Tuesday afternoon at his brother’s home in Waymart and the remains interred there.” (*Carbondale Leader*, February 23, 1883, p. 2)

William Fox badly hurt in accident at the foot of No. 11:

“William Fox, of No. 18, met with a very serious accident last Sunday evening. He was crossing between the loaded and light rack, at the foot of 11, on a plank that reached from one track to the other over the wagon road, and when he reached the middle of the plank it broke, letting him fall into the road a distance of 12 or 14 feet. His upper teeth were nearly all knocked out and one arm sprained so badly that he has not been able to move it since.” (*Carbondale Leader*, June 8, 1883, p. 3)

William Fox now back to work:

“Wm. Fox, who was injured several weeks ago, by falling from a bridge at No. 11 foot, returned to work on Monday last.” (*Carbondale Leader*, July 27, 1883, p. 2)

George Amey comes back from Kansas to visit his parents at the foot of No. 11:

“Mr. George Amey, who worked for the D. & H. twenty-five years ago, but now a successful farmer in southern Kansas, is visiting his parents, Mr. and Mrs. Abner Amey, at the foot of No. 11. It is the first time he has been in this section in over 24 years.” (*Carbondale Leader*, October 5, 1883, p. 2)

Trip of loaded cars destroyed on Plane No. 11:

“A trip of loaded cars got loose at No. 11 head last Monday and running the entire length of the plane the cars were reduced to flinders.” (*Carbondale Leader*, February 29, 1884, p. 2)

Walter Cory has been headman at No. 11 for over 20 years:

“Walter Cory has had charge of No. 11 head over 20 years.” (*Carbondale Leader*, March 17, 1885, p. 1)

Many Gravity planes functioned as autonomous communities:

“Mrs. Michael Rourke has opened a grocery store in her residence near No. 11 foot.” (*Carbondale Leader*, May 12, 1885, p. 1)

6824

Plane No. 12

--Plane 12 was 1,463 feet long (fall 119.64 feet)

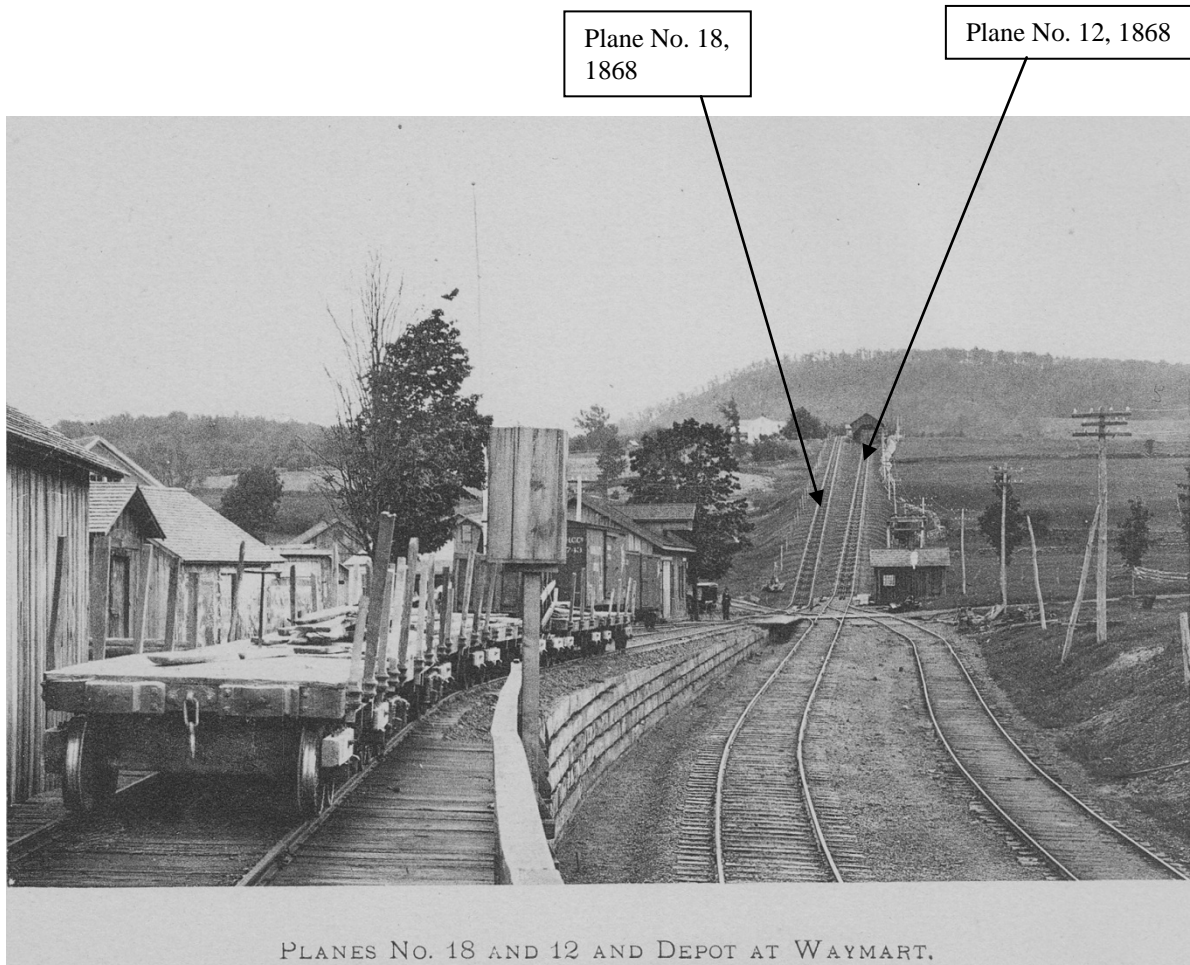
--Level 12 is the “loaded track” from Waymart to Honesdale: 52,194 feet long (fall 430.65 feet)
Level 12:

--from Waymart to Keen's Pond: it ran more or less on the same roadbed as the 1829 roadbed, which was to the left of the Honesdale and Clarksville Turnpike.

--just past Keen's Pond, the 1829 track (which became known as the loaded track after 1843) crossed the Honesdale and Clarksville Turnpike and the Van Auken Brook and ran to Prompton to the right of the Van Auken. From 1829 to 1843, it (Level No. 8) crossed the Lackawaxen at Prompton and continued (on the Four-mile Level) between the turnpike and the Lackawaxen all the way to Honesdale. In 1843, when the Four-mile Level was done away with, and the Ten-mile Level created, the loaded track, from Keen's Pond to Honesdale was on the right side of the Van Auken and the Lackawaxen all the way to Honesdale.

“Altitudes Again. / We are indebted to O. D. Shepherd, Esq. Chief Engineer of the D. & H. C. Co. of this city, for the following elevations, omitting fractions, above tide water, of various points on the Gravity R. R. of the Company: Foot of No. 12 Plane, Waymart, 1415.” (*Carbondale Advance*, September 17, 1870, p. 3)

Hensel view of Planes 18 (on the left) and 12 (on the right):



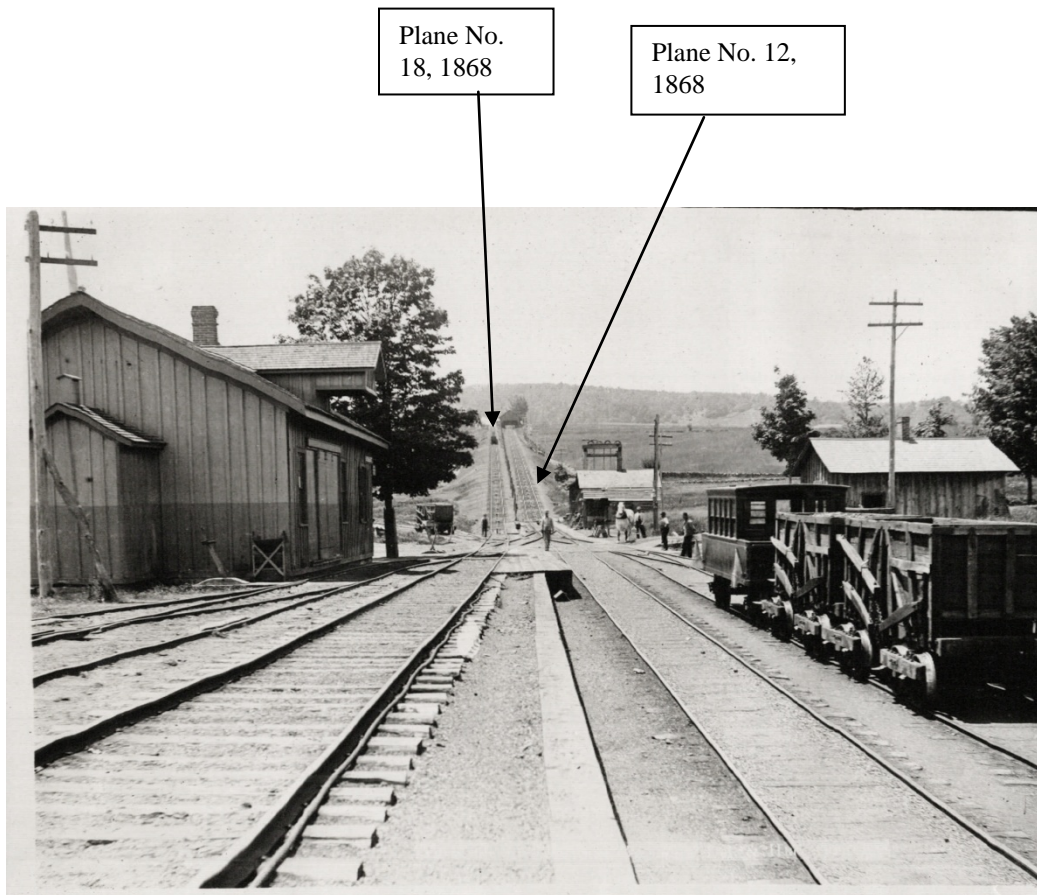
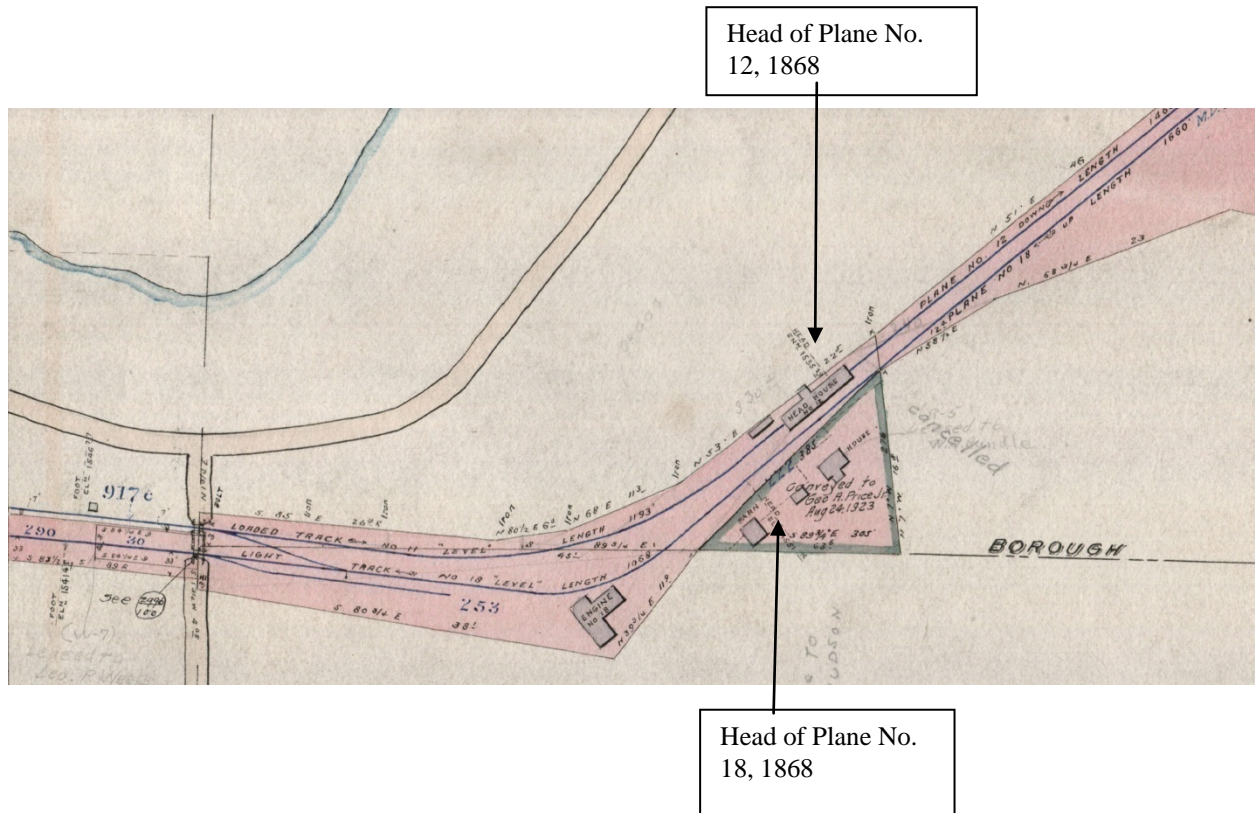
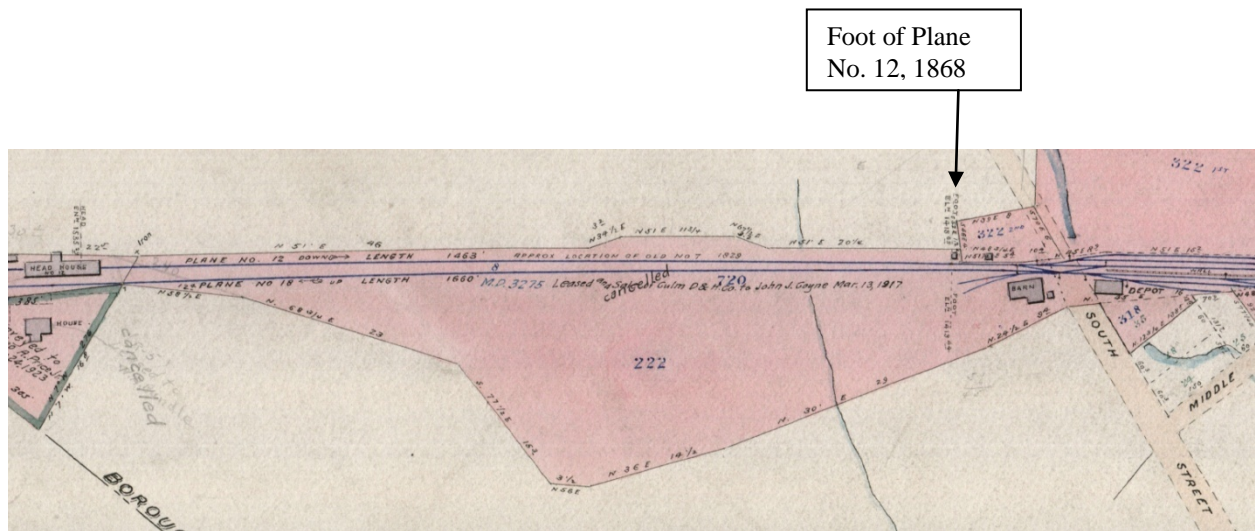


Photo in the collection of the Pike County Historical Society, Milford, PA.

Head of Plane No. 12 from 1895 Gravity Railroad map volume:



Foot of No. 12 from 1895 Gravity Railroad map volume:



Accidents, Facts about the Plane, and Daily Life

Patrick Reardon killed in accident at Waymart:

1862: "FATAL ACCIDENT.—On Friday afternoon last, a sad accident occurred at Waymart by which a lad five years of age named Patrick Reardon, lost his life. The light railroad track is built over the loaded one at that place, and both cross the principal street of the village.-- The child was passing under the light track, and watched the cars upon the same, when a loaded train came upon him unnoticed, knocking him down, and a wheel passing over one of his legs, severed it completely from his body. The little fellow lingered until Sunday morning, when death released him from his sufferings.—*Wayne Co. Herald.*" (*Carbondale Advance*, May 3, 1862, p.2)

L. E. Judd seriously hurt in accident at Waymart:

1862: "We are pained to learn that Mr. L. E. Judd was seriously hurt while passing over to Waymart upon the Coal Cars on Monday morning last. The bumping beams of the Car back of him, we are informed, in some unexpected manner were thrown over the beams of the car on which he was standing, pressing him severely and producing serious internal injuries.—Much solicitude has been felt by his numerous friends here, but reports are favorable for his early recovery." (*Carbondale Advance*, June 7, 1862, p. 2)

New D&H Office and Store House at Waymart, 1862:

“WAYMART.—Among the improvements in this thriving village, we notice that the Del. & Hud. Canal Co. have lately erected a very neat and commodious Office and Store House, and Mr. R. P. Patterson is erecting a fine three-story building on the site of his Hotel, which was destroyed by fire some three years since.” (*Carbondale Advance*, August 2, 1862, p. 3)

Snow fence is controversial in Patterson's field:

“The snow is causing a good deal of trouble on No. 12 plane this winter owing to the unwillingness of Mr. R. P. Patterson to have a snow fence placed in his field. It is said the snow that laid upon the field last spring injured his oat crop to a considerable extent.” (*Carbondale Leader*, February 1, 1884, p. 2)

Hiram Hudson attended "Lights of London" in Scranton:

“Mr. Hiram Hudson, foreman of the Waymart division of the gravity, attended the ‘Lights of London,’ at Scranton last Saturday evening.” (*Carbondale Leader*, February 8, 1884, p. 2)

Hiram Hudson's peacock's plumage damaged by a trip of light cars:

“A beautiful peacock owned by Hiram Hudson, of No. 12, attempted to fly across the track on Monday last and had its tail cut off by a trip of light cars. It was a bird highly prized by Mr. Hudson.” (*Carbondale Leader*, February 29, 1884, p. 2)

James Miner now walking the planks at No. 12:

“James Miner, formerly at No. 20, is walking the planks [track inspector] on No. 12 curve.”(*Carbondale Leader*, March 28, 1884, p. 2)

Hiram Hudson and Wallace Case have made a snowplow for No. 12 plane:

“Mr. Hiram Hudson, foreman of the Waymart division of the gravity, and Wallace Case, have made a mammoth snow plow to be used on No. 12 plane. It does first-class work and saves many back aches for the boys.” (*Carbondale Leader*, February 27, 1885, p. 1)

Michael Rourke was foreman and wheelman at No.12 for about 20 years:

“Mr. Michael Rourke departed this life last Saturday evening at 7 o’clock, aged 62 years. He had been employed by the D. & H. about 35 years and has been foreman and wheelman at No. 12 about twenty-one years, having in all this time given perfect satisfaction to his employers, and

the men employed under him have always regarded him as a friend and an obliging foreman—all of whom will be saddened to learn of his death. He was everyone's friend and those who mourn his loss are many. He was a man honest and upright in his dealings with his fellow-men and a devoted member of the Catholic church, and he died in the hope of a blessed immortality beyond the grave. He leaves a wife and eleven children, three of whom are married and live in Waymart; the others are at home to comfort and protect the sorrowing wife and mother. The funeral will be attended this afternoon at 1 o'clock from the residence at No.11 foot. Interment in the new Catholic cemetery in Carbondale." (*Carbondale Leader*, March 10, 1885, p. 1)

George Perkins now works at No. 12:

"Richard Wonecott, formerly foreman at No. 8, has been transferred to the position of foreman at No. 10, and George Perkins, formerly foreman at No. 10, has accepted the position at No. 12 made vacant by the death of Mr. Rourke." (*Carbondale Leader*, March 13, 1885, p. 1)

Improvements at Planes 5, 6, 12, and 18 by William McMullen:

"Wm. McMullen has put planes 12 and 18 in first class order, and is now putting new ties and new rails on planes 5 and 6." (*Carbondale Leader*, May 7, 1886, p. 4)

Two deaths from inflammation of the stomach:

"Two Deaths on the Gravity. / James Brady, an employe at the head on No. 8 plane on the Gravity railroad, died about 3 o'clock on Sunday afternoon, of gastritis, after a short illness. He was taken sick while at work on Friday morning. He was 37 years of age, and leaves a wife, and three children. / Another death from the same cause as the above occurred yesterday morning. Philander Swingle, employed at headman at No. 12, complained of feeling unwell on Sunday, and growing worse on the following day, a physician was summoned, who pronounced it to be a case of inflammation of the stomach. He continued to grow worse and died yesterday at 3 a.m. He resided near Waymart, was about 30 years of age, and leaves a wife and four children. Interment will take place at Canaan Corners to-morrow afternoon." (*The Journal*, April 14, 1887, p. 3)

George Tuttle killed at the foot of Plane No. 12:

"Geo. Tuttle, of Waymart, an old employe of the D. & H. C. Co., was killed by the cars while at work at the foot of Plane No. 12 in that borough last evening." (*The Journal*, September 8, 1887, p. 3)

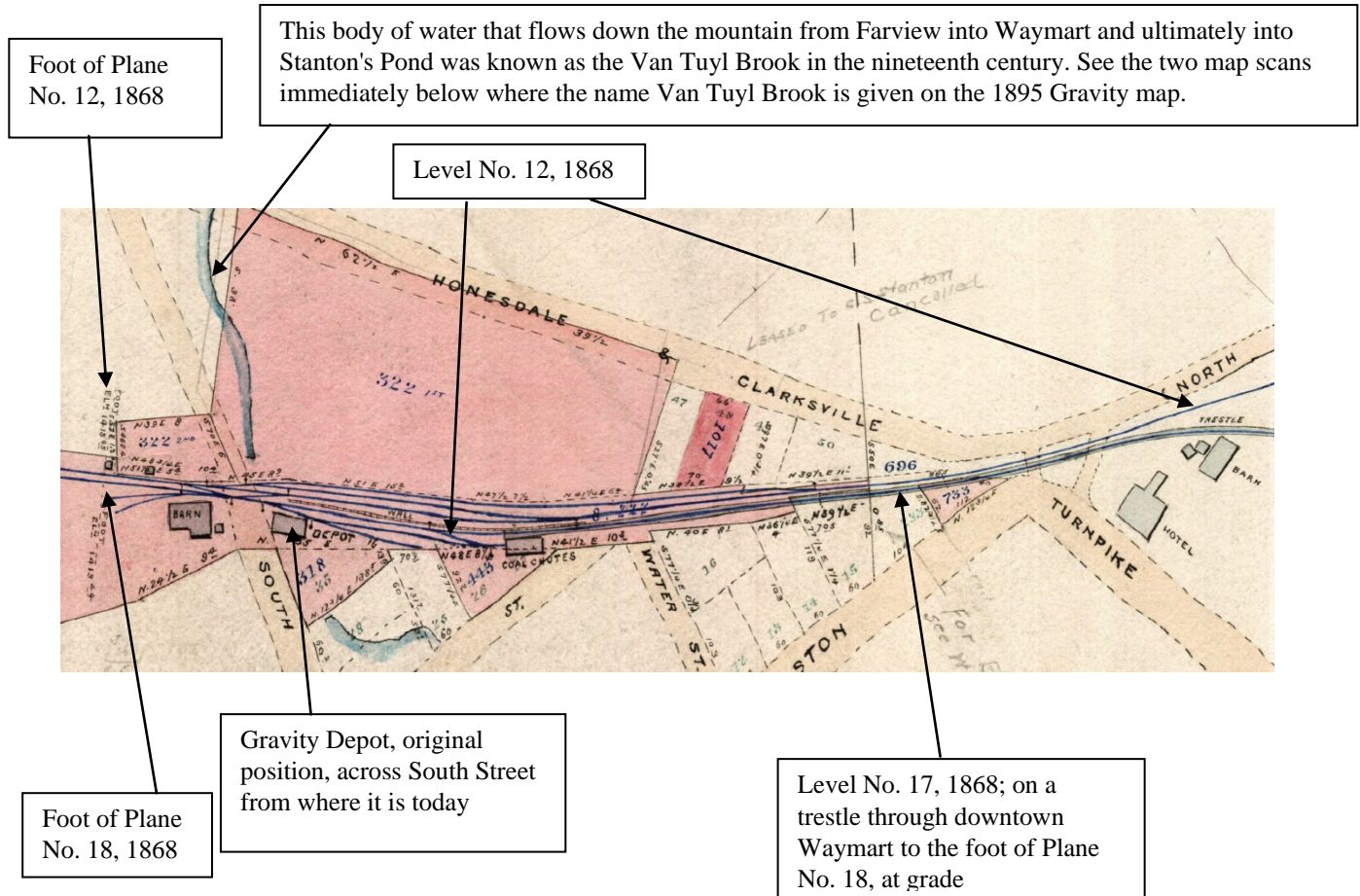
The Tuttle accident as reported by the Carbondale Leader:

“A Gravity Employe Killed. / George Tuttle, an employe on the D. & H. gravity at the foot of No. 12, met his death on the road last night about six o’clock. / Tuttle was drawing a car from a switch with a horse, as is done at many of the grades and when he unhooked the horse from the car he did not get out of the way in time. He was struck and received injuries in the stomach from which he died two hours afterward. He was about 50 years of age and leaves a wife and four sons, all grown. Their home is in Waymart.” (*Carbondale Leader*, September 8, 1887, p. 4)

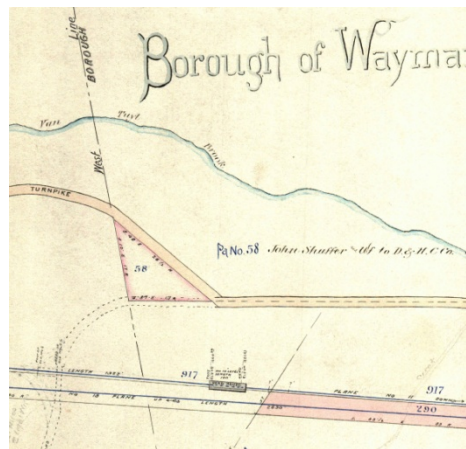
6825

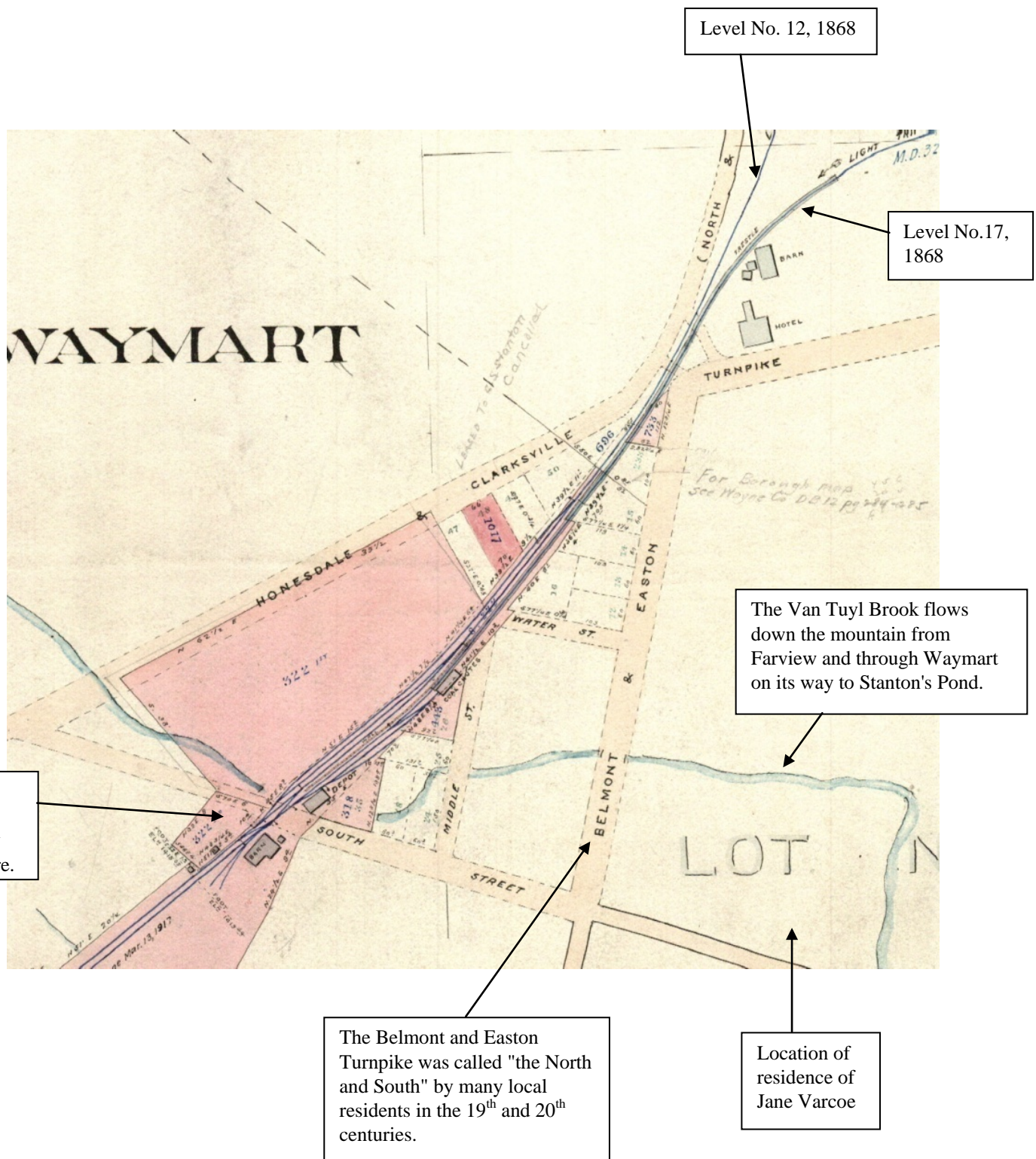
Downtown Waymart: Let's Have a Look Around

1895 Gravity Railroad map: two views:

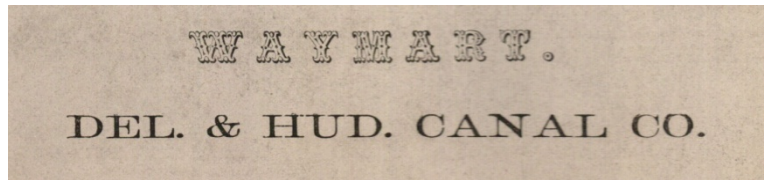


Van Tuyl Brook, two views:





View of Waymart in 1860 by Johnson (Scranton, PA); photo in the archives of the Wayne County Historical Society, Honesdale:



About Waymart in General

New D&H office and store house in Waymart:

“WAYMART.—Among the improvements in this thriving village, we notice that the Del. & Hud. Canal Co. have lately erected a very neat and commodious Office and Store House, and Mr. R. P. Patterson is erecting a fine three-story building on the site of his Hotel, which was destroyed by fire some three years since.” (*Carbondale Advance*, August 2, 1862, p.3)

S. A. McMullen succeeds H. March in care of the railroad at Waymart:

1869: **"Railroad Change.** / MR. S. A. McMULLEN of Waymart, has recently succeeded Mr. H. MARSH, in the care of the Railroad track here, we believe both as to repairs of track and running of cars. We gain a subscriber by the change, as it was one of Mr. M's faults not to patronize a home paper." (*Carbondale Advance*, March 13, 1869, p. 3)

More on Silas McMullen from Jerry Palko's notes:

"Born October 9, 1836, in Clinton, Wayne County, Silas McMullen came to Carbondale on February 22, 1869, and on March 1, was named assistant superintendent of the Pennsylvania Division of the Delaware & Hudson Canal Company's Division railroad. He was married to Louisa A. Hubbard of Wayne County." Jerry Palko notes

6826

Level No. 12: Ten-mile level

Level 12: Waymart to Honesdale: 52,194 feet long, with a fall of 430.65 feet
Elevation above tide: 985 feet

--the beginning of the level was at South Street in Waymart

Here are some views of Level 12 between Waymart and Honesdale:

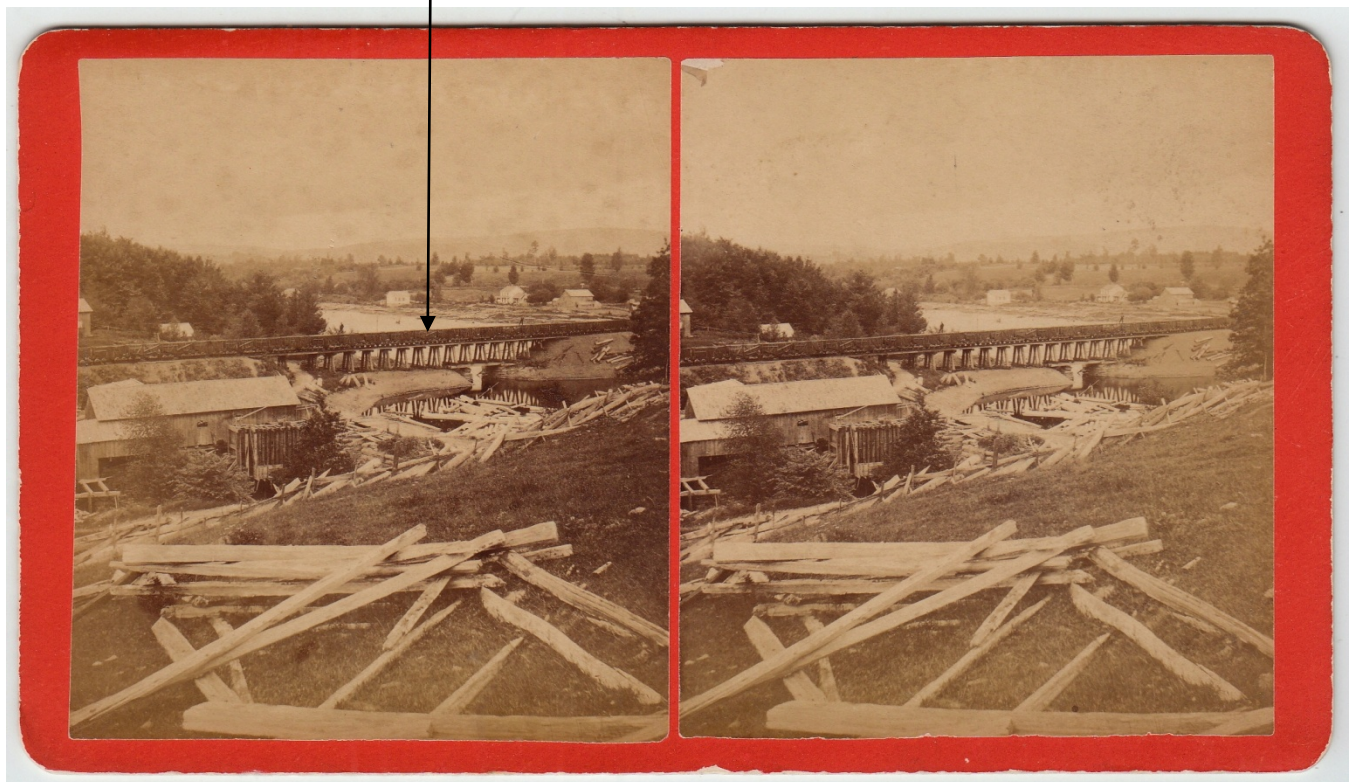
Hensel stereocard No. 1152: *Bird's-eye View of Keen's Lake*

Level No. 12, 1868; the
loaded track from
Waymart to Honesdale



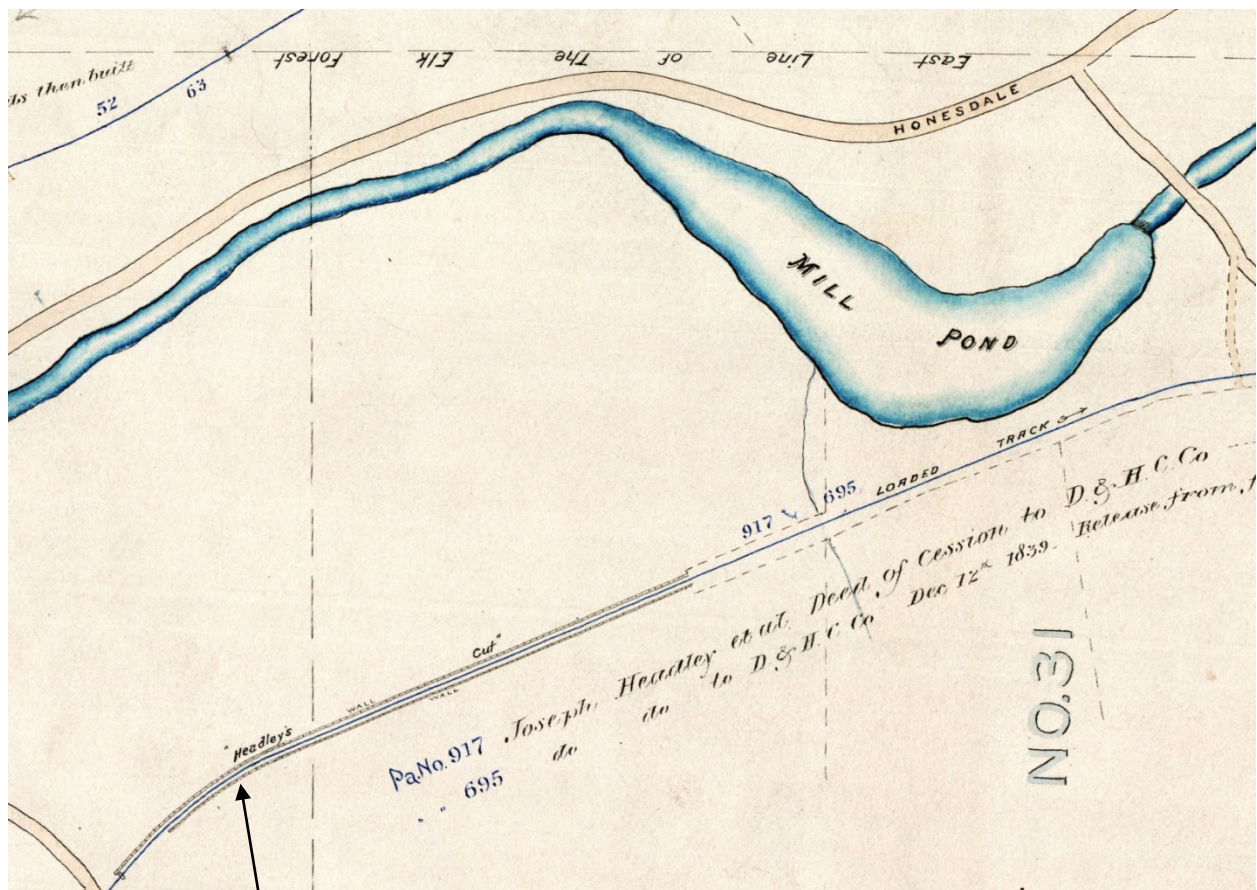
Hensel stereocard No. 1153: *Delaware & Hudson Track crossing Keen's Lake*

Level No. 12, 1868;
the loaded track from
Waymart to Honesdale



Headley's Cut from 1895 Gravity Railroad map volume:

There was a section of trestle work on the loaded track of the D. & H. R. R., between Steene and Prompton (just east of No. 16), that was known as "Headley's High Work" also "Headley's Cut": I have never been on foot in this area, but it seems very likely that the remains of Headley's Cut are still very much visible today.



Headley's Cut on the loaded track (Level 12).

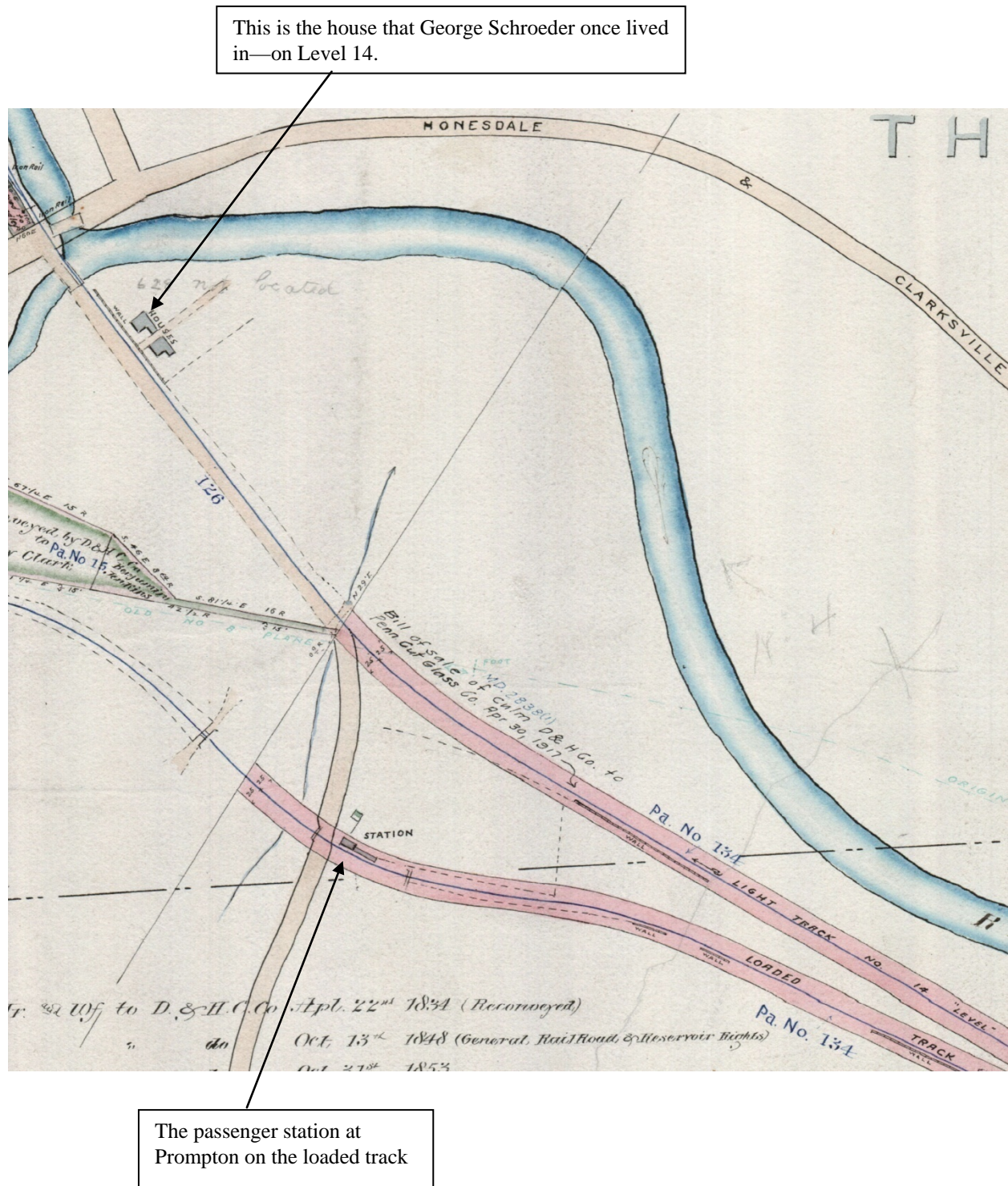
Break in Trestle at Prompton at Headley's High Work:

"On Saturday last a train of loaded cars crushed through the trestle work on the D. & H. R. R., near Prompton, known as "Headley's High Work." One German riding upon the train by the name of Nolander, was instantly killed, and some of the runners badly hurt. (*Carbondale Advance*, Saturday, February 10, 1866, p. 2)

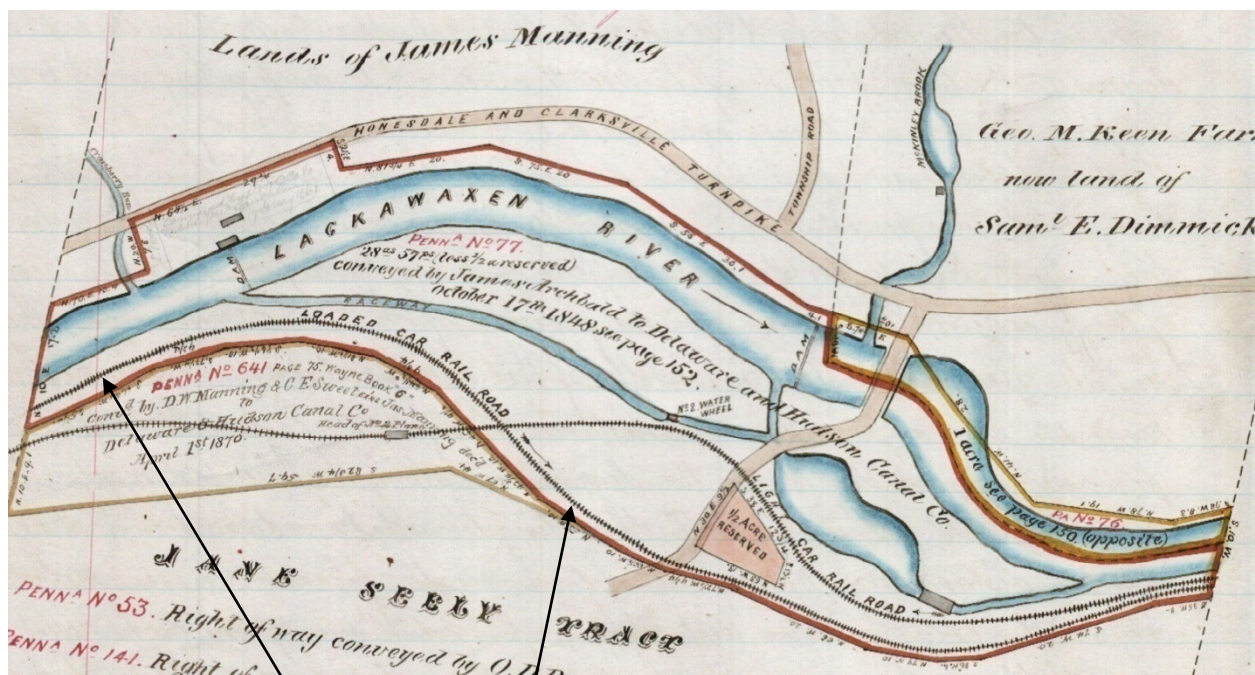
Molter boy killed trying to get on a loaded train at Seelyville:

July 30, 1875: "Andrew Molter, a boy, fourteen years old, trying to get on loaded train at Seelyville, Pa., fell under and five cars ran over him, killing him almost instantly" (*Auditor General Report*, 1875, p.231)

The Prompton passenger station on the loaded track (Level 12) from the 1895 Gravity Railroad map volume:

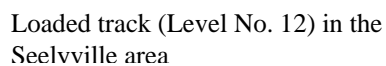


Another view of the loaded track in the Plane 14 area is given on the map on page 151 in the D&H Deeds PA, pp. 150-151, that illustrates the deed, dated October 17, 1848, between James Archbald and wife and The Delaware and Hudson Canal Company. Here is that map:



Loaded track in the area of Plane No. 14 (on the light track)

Note the two water power operations (saw mill and foundry) in Seelyville that used the Lackawaxen as a source of power.



Accidents, Facts about the Plane, and Daily Life

Break in Trestle at Prompton near Headley's High Works:

"On Saturday last a train of loaded cars crushed through the trestle work on the D. & H. R. R., near Prompton, known as "Headley's High Work." One German riding upon the train by the name of Nolander, was instantly killed, and some of the runners badly hurt. (*Carbondale Advance*, Saturday, February 10, 1866, p. 2)

Boy run over by five cars at Seelyville:

July 30, 1875: "Andrew Molter, a boy, fourteen years old, trying to get on loaded train at Seelyville, Pa., fell under and five cars ran over him, killing him almost instantly" (*Auditor General Report*, 1875, p.231)

Bad accident caused by a misplaced switch:

1877: "Almost a Serious Accident. / While Col. Howard and a company of soldiers from *Scranton* were enjoying an excursion over the Gravity Railroad between here and Honesdale, last Monday, accompanied by a party of friends, they met with a narrow escape from serious injury, owing to a misplaced switch between Prompton and Honesdale, which some miscreant had tampered with. They left here with two cars of military and three cars of ladies and children. After leaving Prompton, the two forward cars were cut loose from those containing the ladies and children, in order to give the soldiers a brisk run down the mountain side. They were going at a rapid rate, when, too late to stop the cars, the switch was discovered to be misplaced at a point a few yards before reaching a most dangerous part of the road—a culvert which spanned a rocky ravine some forty feet deep. The cars left the track, but were going with such speed that they ran upon the sills, beyond the culvert, and hurled the entire party down a culm bank some thirty feet below. The escape of the party was miraculous. Had not the axle of the forward car broken and thus steered the car, as it were, away from the culvert, it must have gone into the abyss and few would have escaped alive. As it was, no one but the brakeman was hurt, and he, it is feared, very seriously, his spine having been wrenched in the overturning of the car. The other three cars, had they been attached to the front ones, must surely have gone over with their freightage of women and children, and one of the most dreadful accidents ever known in this region would have been the result. There is no doubt as to the intention of the man who opened that switch and spiked it fast. It was a diabolical attempt to destroy the lives of the entire party. The switch is a few yards this side of the ravine. Ninety-nine times in a hundred a car leaving the track at that point would have gone into the ravine. It was a miracle that these cars sped past it." (*Carbondale Advance*, September 1, 1877, p. 3)

Extra train put on ten-mile level:

1883: "An extra train was put on the ten mile on Monday last. Jack Pierce runs it." ("GRAVITY NOTES," *Carbondale Leader*, March 30, 1883, p.3)

Man killed as he tried to drive a cow from the tracks:

1883: "A terrible and fatal accident occurred on the ten mile level, on Wednesday, by which William Rhodes lost his life. It seems that he was trying to drive a cow from the track when a loaded coal train came along, he being old and deaf did not hear it. The cars knocked him down injuring him so badly that he lived but an hour. He lived near Keen's pond, and was highly respected by all who knew him. He was the father of Mrs. George Phillipi, of Carbondale." ("GRAVITY NOTES," *Carbondale Leader*, April 20, 1883, p. 3)

Two people killed by car No. 2198 at different times:

1883: "The same car that killed Ira Stone several years ago on the light track, was the one that ran over and killed Wm. Rhodes on the ten mile level last week. The car was number 3198. This is quite a coincidence when you reflect that there are about six thousand cars in use by this company." (*Carbondale Leader*, April 27, 1883, p. 3)

Son of foreman of ten-mile level killed at Waymart:

"Samuel Hoyle, a brakeman on the ten-mile level, met with a serious accident last Friday. He was coming over the highworks at Waymart with his trip of light cars and in walking the trucks his glove caught on the top rail of the car throwing him off. He struck on the planking and from there fell to the ground a distance of about twelve feet. He sustained a broken shoulder blade, one wrist badly sprained and he was otherwise bruised. He is a son of Mr. Wm. Hoyle, of Prompton, foreman of the ten-mile level." (*Carbondale Leader*, October 28, 1884, p. 1)

Locomotive on loaded track to Waymart:

As early as 1884, perhaps earlier, a locomotive was, on occasion, used on the 10-mile level (going up the grade on the loaded track) to pull passenger trains from Honesdale to Waymart. This we know from a note in the "Gravity Notes" in the *Carbondale Leader* of February 8, 1884, p. 2: "The gravity passenger trains were pulled from Honesdale to Waymart by a locomotive during the last three days of last week."

John Leary in bad accident near No. 16 head:

"John Leary, a brakeman on the ten mile level, was dangerously injured last Friday. A few weeks ago he was splitting some wood and cut off one of his fingers. He was on his way to Waymart to have it dressed and was walking on the trucks of the light cars at No.16 head when he struck the sore finger against the center rope of the car. The pain was so severe that he fainted and fell between the trucks of the cars. One arm was badly injured and one leg was broken and mangled besides other injuries. He was reported very low yesterday and his physicians had but slight hopes of his recovery." (*Carbondale Leader*, April 14, 1885, p. 1)

John Leary died from injuries received at No.16:

"John Leary, the young man injured at No. 16 a couple of weeks ago, died at his boarding place in Prompton last Sunday afternoon. Deceased was aged about 29 years, and was unmarried." (*Carbondale Leader*, April 28, 1885, p. 1)

William Jordan killed instantly as he tried to jump on a loaded train:

"William Jordan, of Prompton, who was employed on the D. & H. gravity road between Waymart and Prompton, jumped off a train at Prompton on Tuesday afternoon, and in attempting to jump on again fell under the train. Twelve loaded cars passed over him, killing him instantly, and mangling his body in a horrible manner. He was about 26 years of age and unmarried." (*The Journal*, January 8, 1887, p. 3)

The Gravity Road was like an immense conveyor belt with all work stations connected:

1887: "We understand that the coal-dumpers at Honesdale will not work after 6 o'clock p. m., so that when the road works as late as it did Monday—9 p.m.—the coal cars are blocked back on the ten mile level. Tuesday morning Conductor Hubbard's train was delayed some two hours by this cause." (*Carbondale Leader*, March 3, 1887, p. 4)

6827

The Gravity Railroad and the D&H Canal came together at Honesdale: Let's Have a Look Around.

Here is a map view from the 1895 Gravity Railroad map of the arrival area of the loaded track in Honesdale:

The loaded track as it crosses the Lackawaxen River and enters downtown Honesdale



Plane No. 13 on the light track

One track became many once Level 12 entered downtown Honesdale.

Depot

At one point, there was a feeder here for the Canal basin from the Lackawaxen.

Union loaded Plane, No. 12 1/2

Foot of Plane No. 13

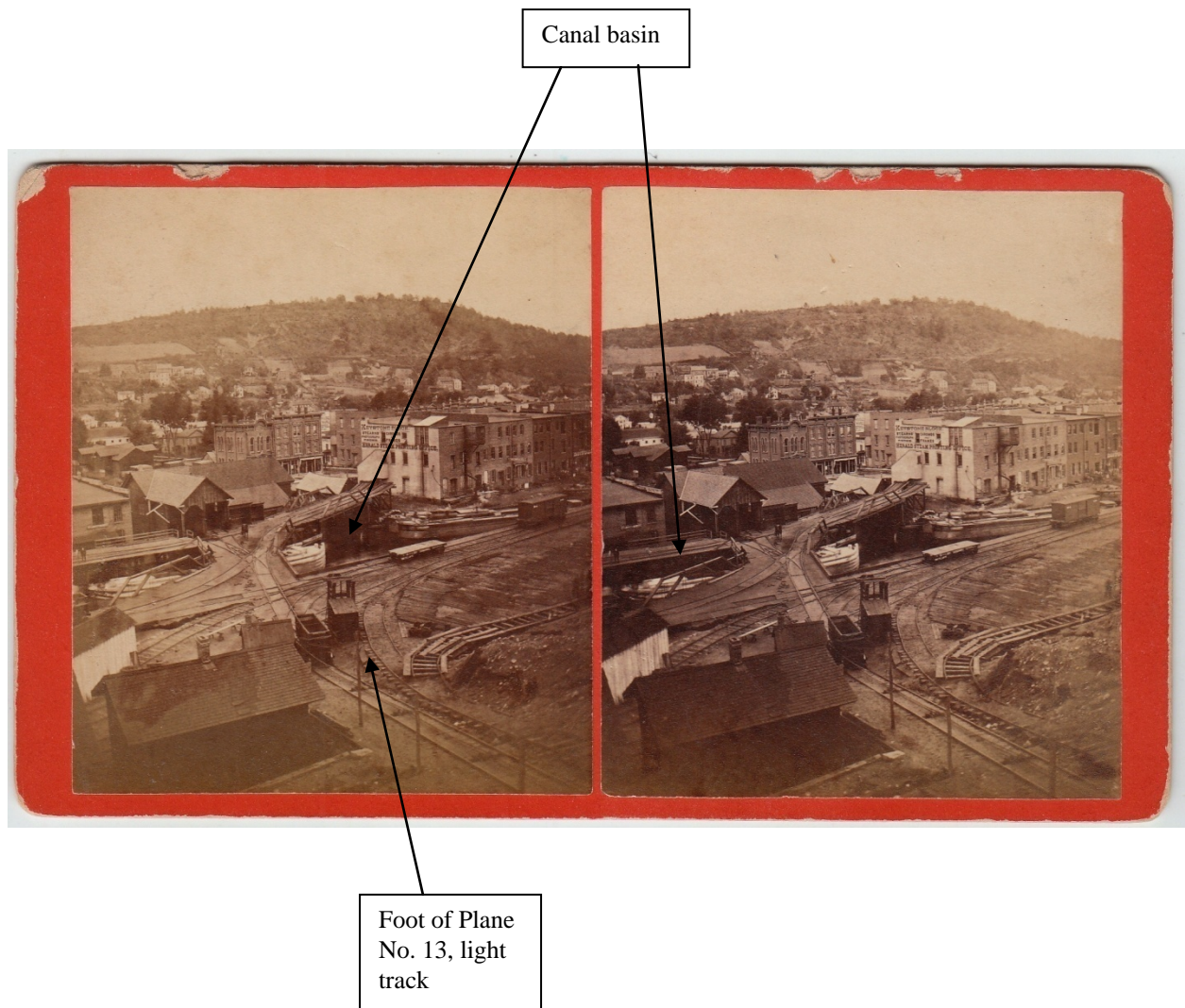
D&H office

Coal office

Front Street is present-day Main Street

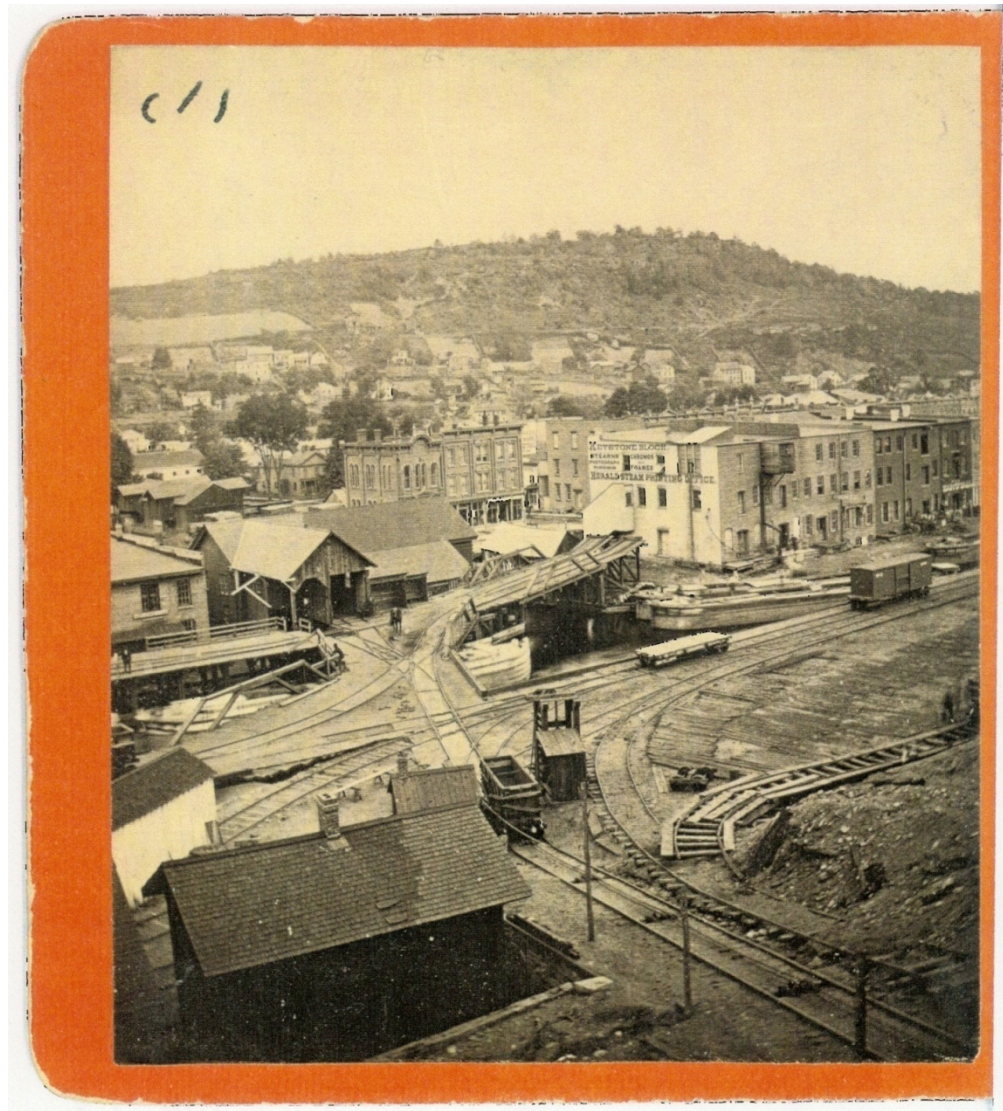
Here is the Hensel view of this area: from two different series of cards.

Hensel No. 921: *Terminus of D. & H. RR., and D. H. Canal*

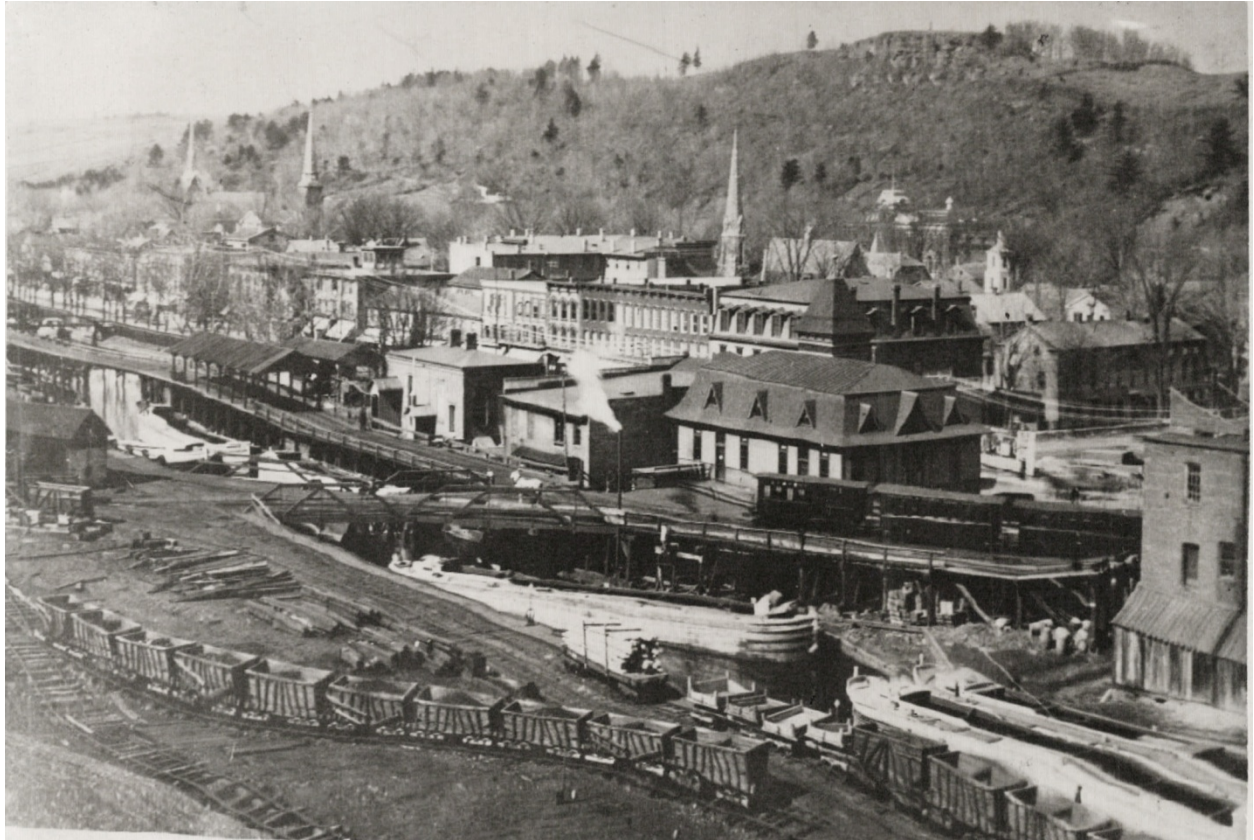


Hensel stereocard No. 921: *Terminus of D. & H. RR., and D. & H. Canal*

This is a brighter and much more readable print of the Hensel photo given immediately above.

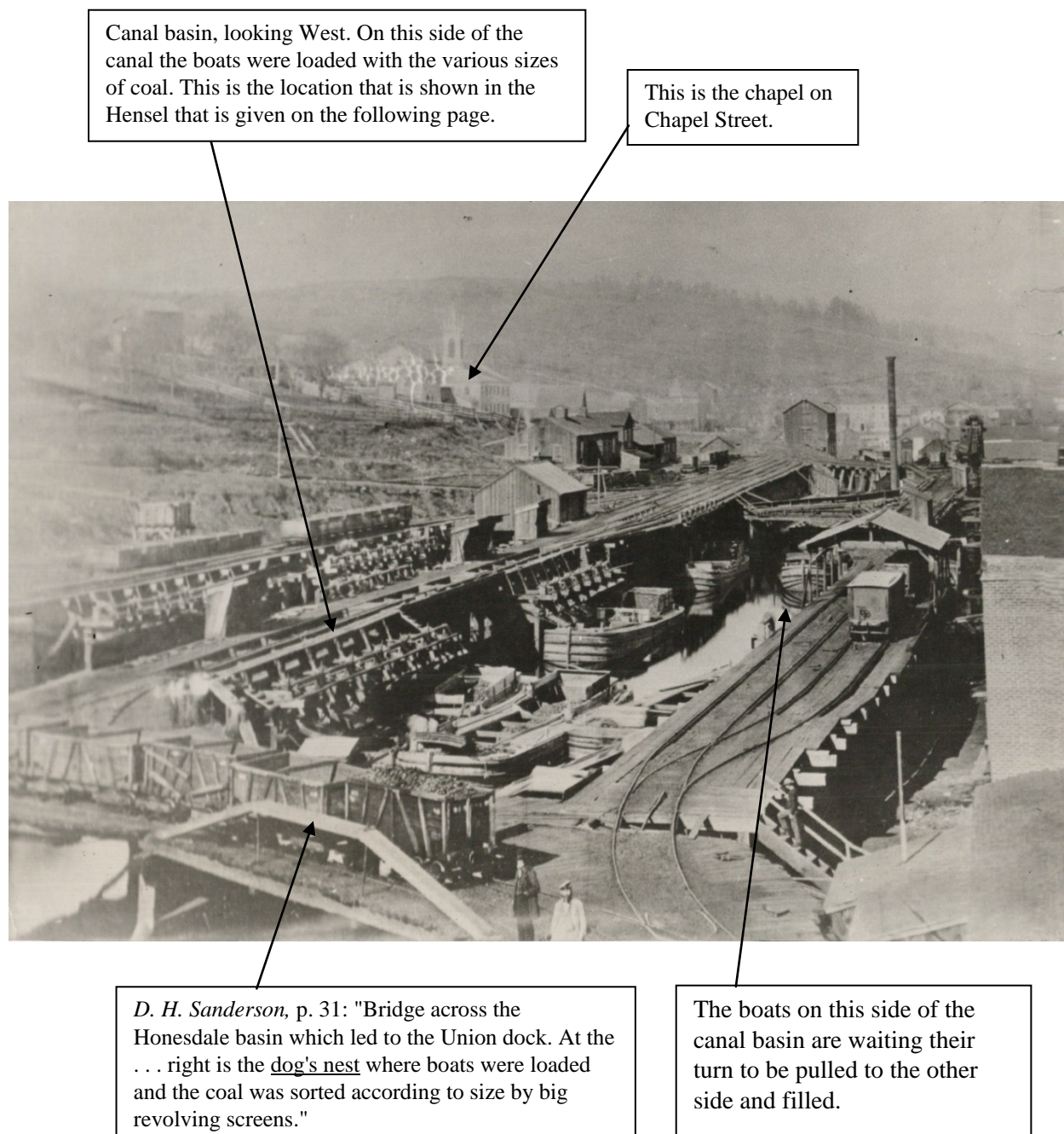


The coming together of the D&H Canal and the D&H Gravity Railroad at Honesdale. Photo in the collection of the Pike County Historical Society.



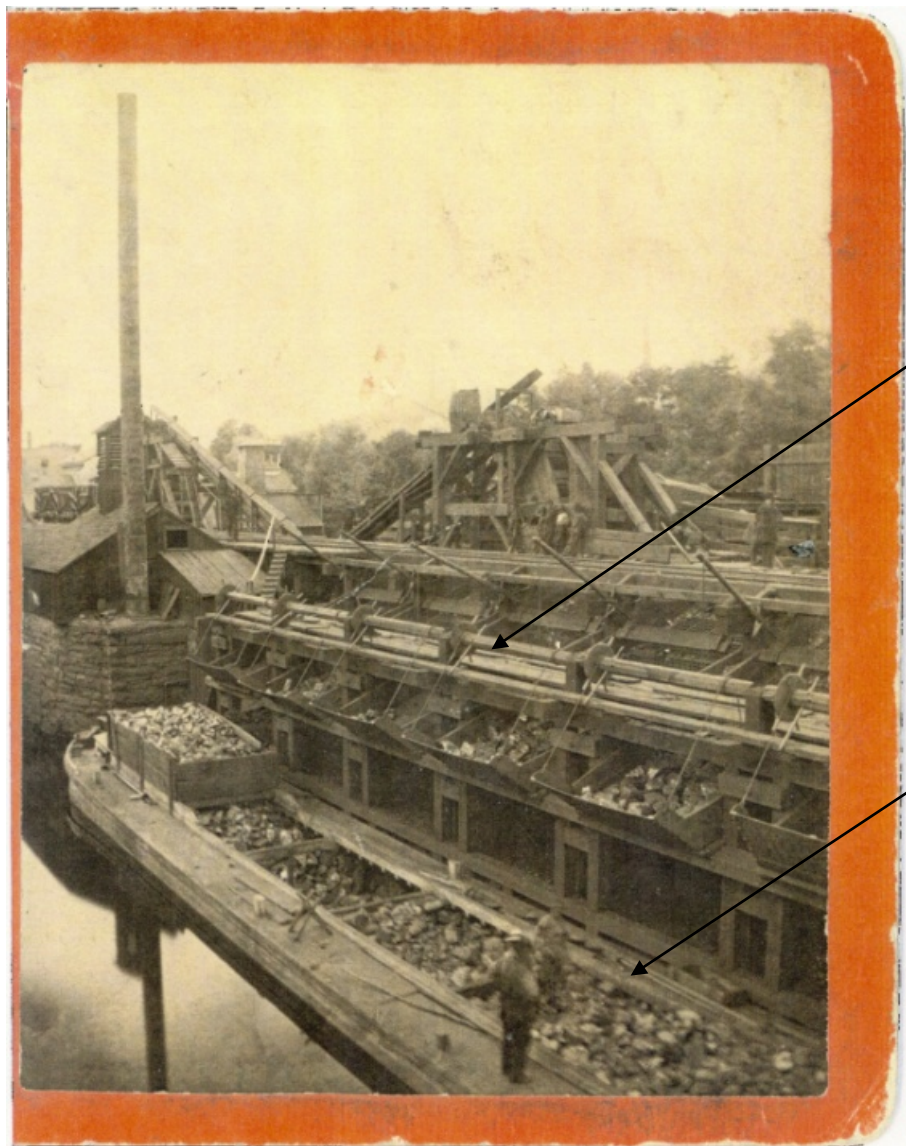
Side note: In *The New York Times* of December 15, 1887, we read the following notice: "CLOSING OF THE CANAL. / Rondout, N. Y., Dec. 14.—The last laden boat on the Delaware and Hudson Canal reached tidewater here this afternoon amid the cheers of an excited throng of boatmen. The last boat carried cedar trees and flags in its bow, and the Captain, in accordance with the usual custom, was presented with a huge pumpkin pie. The canal is as free of ice—and a similar statement is applicable to the Hudson River—as in midsummer. The extreme mildness of the weather is commented upon."

The coming together of the D&H Canal and the D&H Gravity Railroad at Honesdale. Photo in the collection of the Pike County Historical Society.



Possibly Hensel No. 925. *Ruth*, p. 61, uses this photograph and identifies it as “Circa-1896 photograph by Louis Hensel.”

Loading canal boats at Honesdale

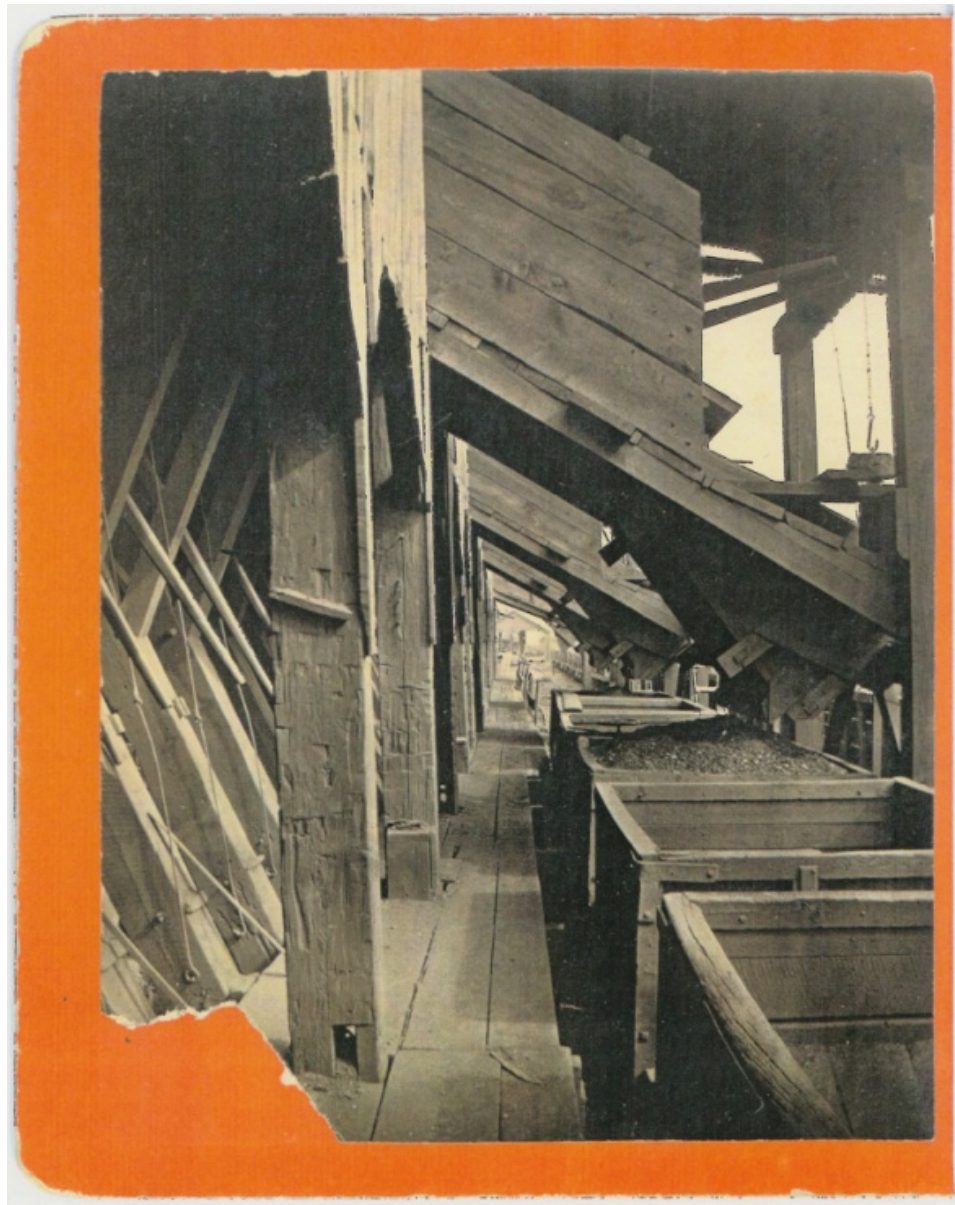


Revolving
screens here
sorted the
coal by size:
stove, egg,
grate.

Canal boat,
loaded with
coal and
ready for
shipment.

The remarkable photograph given below of the interior of coal chutes is probably a Hensel, taken perhaps circa 1896, when the Hensel given above was taken. The original of the color print from an original stereocard is in the archives of the Minisink Valley Historical Society. *Lowenthal* uses this photograph on page 120 and identifies the source for his photo as the National Canal Museum.

These are not the coal chutes above the canal basin at Honesdale. These may well be the Pennsylvania Coal Company coal chutes at Hawley.



6828

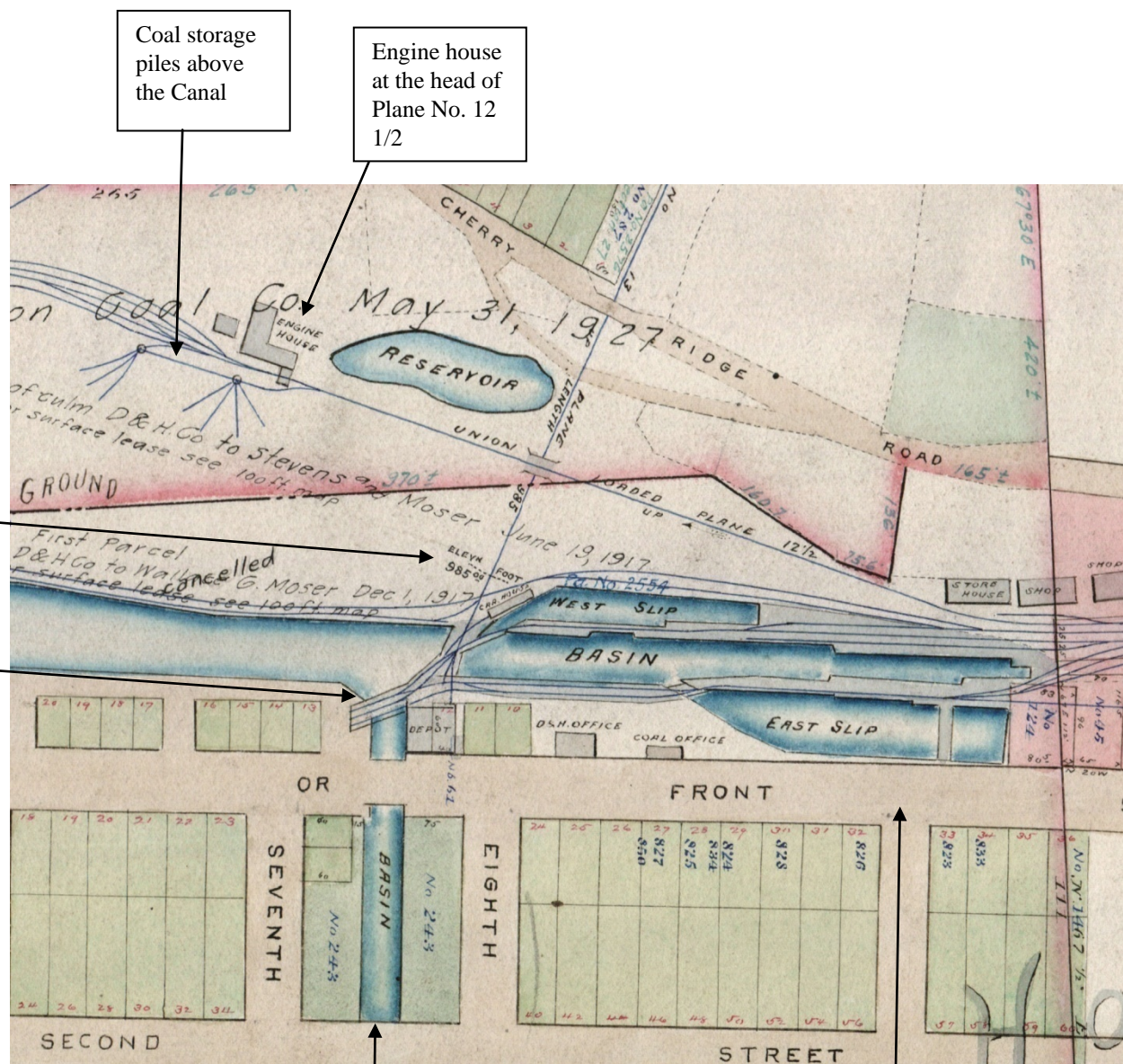
Six Downtown Honesdale Subjects: Let's Have a Look Around

1. Foot of D&H Plane 13, D&H Office, Coal Office
2. Union Plane: Loaded and Light
3. Beginning of the D&H Canal
4. Erie Pockets
5. Union Docks
6. Gravity Depot at Honesdale

6829

1. Foot of D&H Plane 13, D&H Office, Coal Office.

Why was the basin extended under Front Street to the block between Seventh and Eighth? Commercial space for private concerns.



The Wilbur and Patmore Basin. “Wilbur and Patmore regularly ran thirty-six deck canalboats for the transportation of merchandise from New York to Honesdale without trans-shipment, having a fleet of steamboats on the Hudson River solely employed in towing their freight boats from the foot of Jay Street, New York City, to Rondout.” (Wakefield, p. 48)

Front Street is now called Main Street

In Leslie’s *Canal Town*. . . , p. 164, we read the following about the bridge across the arm of the Canal that extended across Main Street between Seventh and Eighth Streets: “Honesdale’s Main Street was provided with two new bridges in the 1870’s. To enable traffic to cross the arm of the

canal which extended across Main Street about where the Honesdale Dime Bank now stands, a bridge usually referred to as 'the basin bridge' was needed. . . / When the basin bridge had to be replaced in 1871, what was called a 'tubular arch bridge' made by E. King & Co. of Cleveland, Ohio, was put up. This iron bridge can be seen in many photographs (Plate IV) and was fifty-four feet long, had two roadways, each twelve feet wide, and two sidewalks, six feet each. The total price was \$1,836."

Here is a photograph of that bridge, which separated the D&H Canal Honesdale Basin and what was called the Wilbur and Patmore Basin:

The tubular arch bridge (the "Basin Bridge") that was installed in 1871. This is Main Street, Honesdale, looking south, from the Basin Bridge

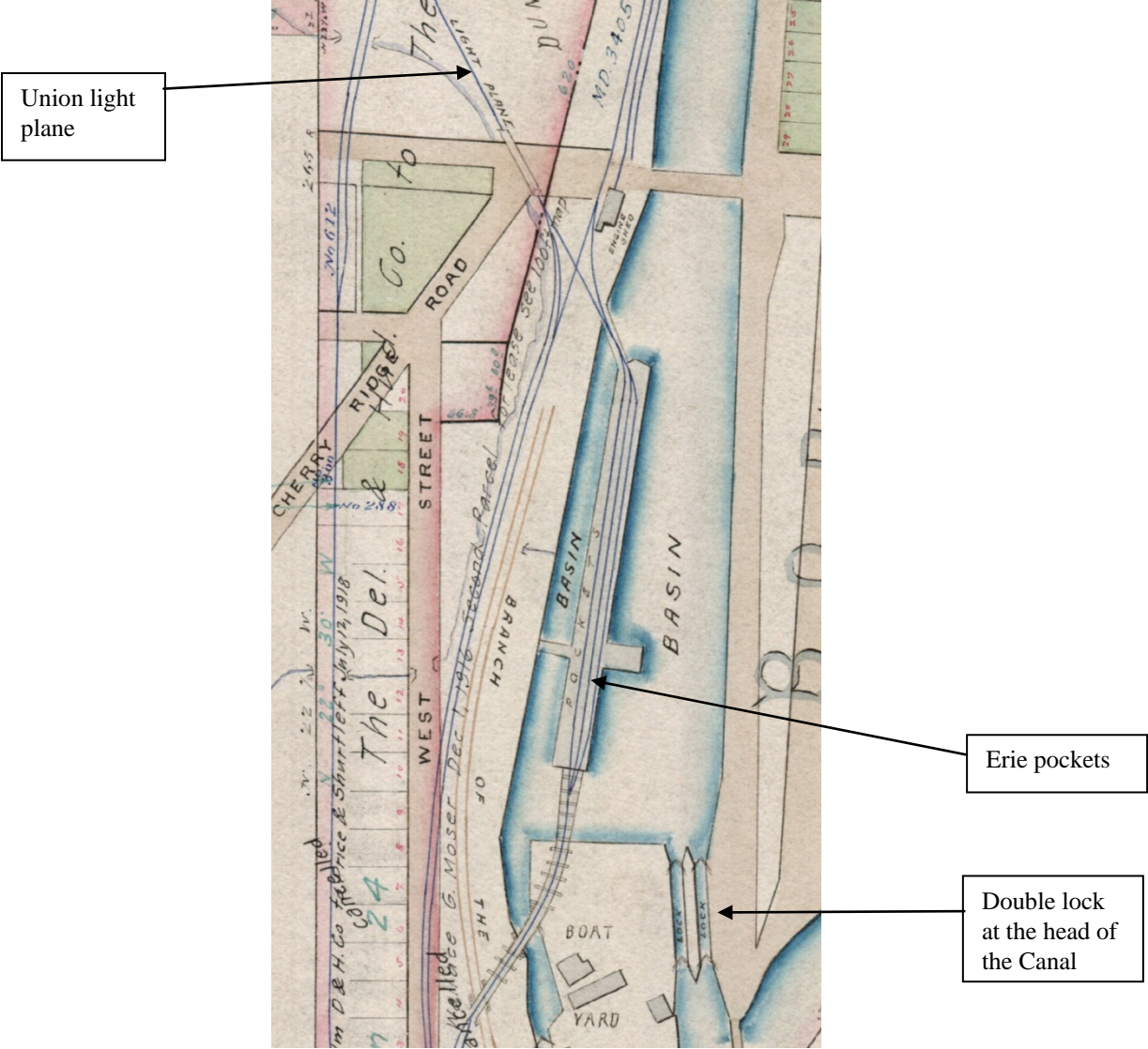


"The second iron bridge to be installed in Honesdale in the 1870s was the one across the Lackawaxen at Park and Main Streets. This bridge, which remained in service until 1902 when it was destroyed by an ice jam, was also made by E. King Company of Cleveland. The November 19, 1874 issue of the Honesdale *Citizen* contains the following description of the bridge: "The length of the structure is 76 feet, and it is supported by three arches. There are two 14 foot roadways, and two 7 foot side walks. The flooring is comprised of three-inch oak plank. The walks are protected by an iron railing surmounted by sharp spear heads, rendering it impossible for loafers and blackguards to sit upon them with any great degree of comfort and making it a perfectly safe place for ladies to pass without fear of insult."

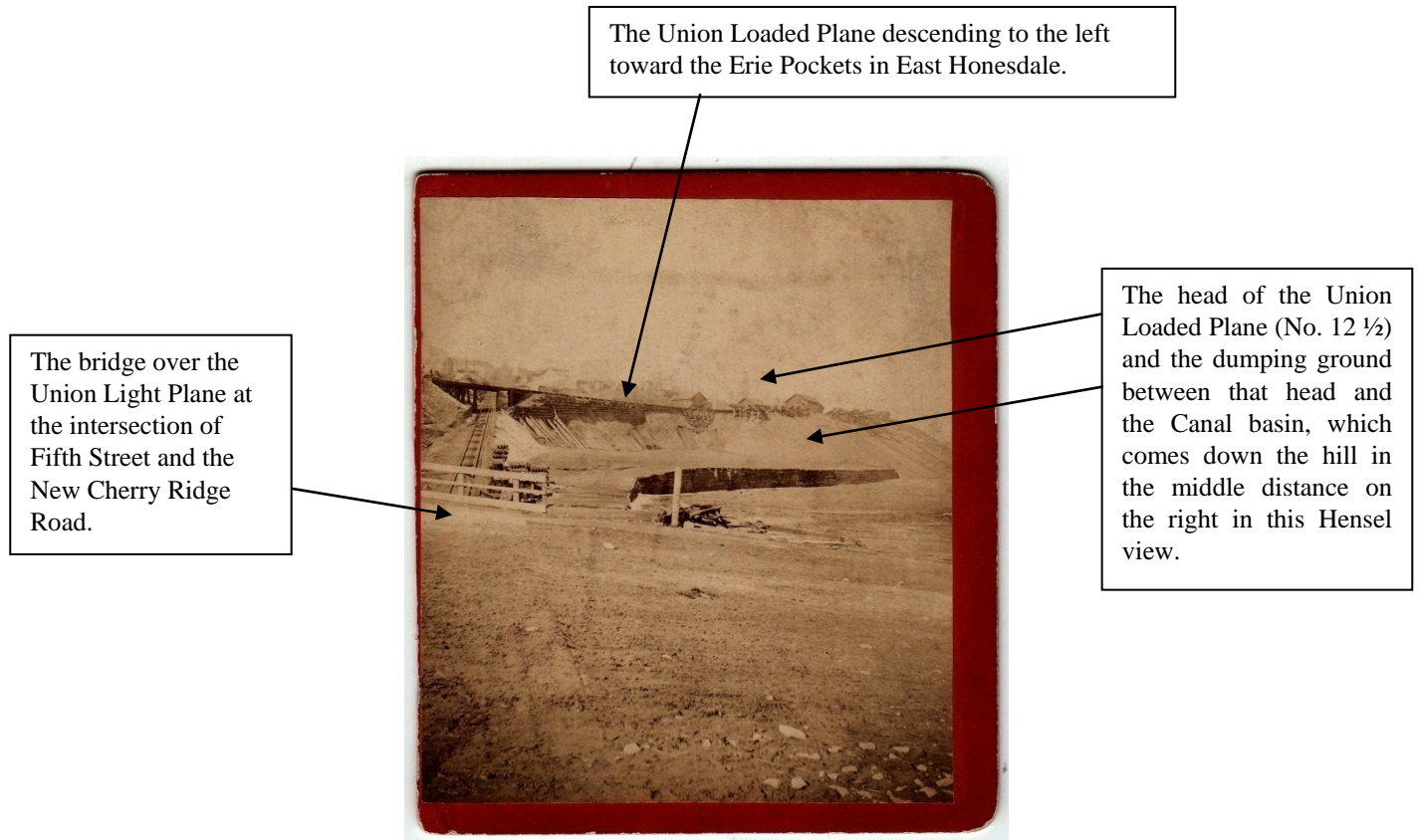
2. Union Plane: Loaded and Light: became operational August 3, 1867

[illegible]

Union Light Plane—which ran from the Erie Pockets to the head D&H Plane No. 13:



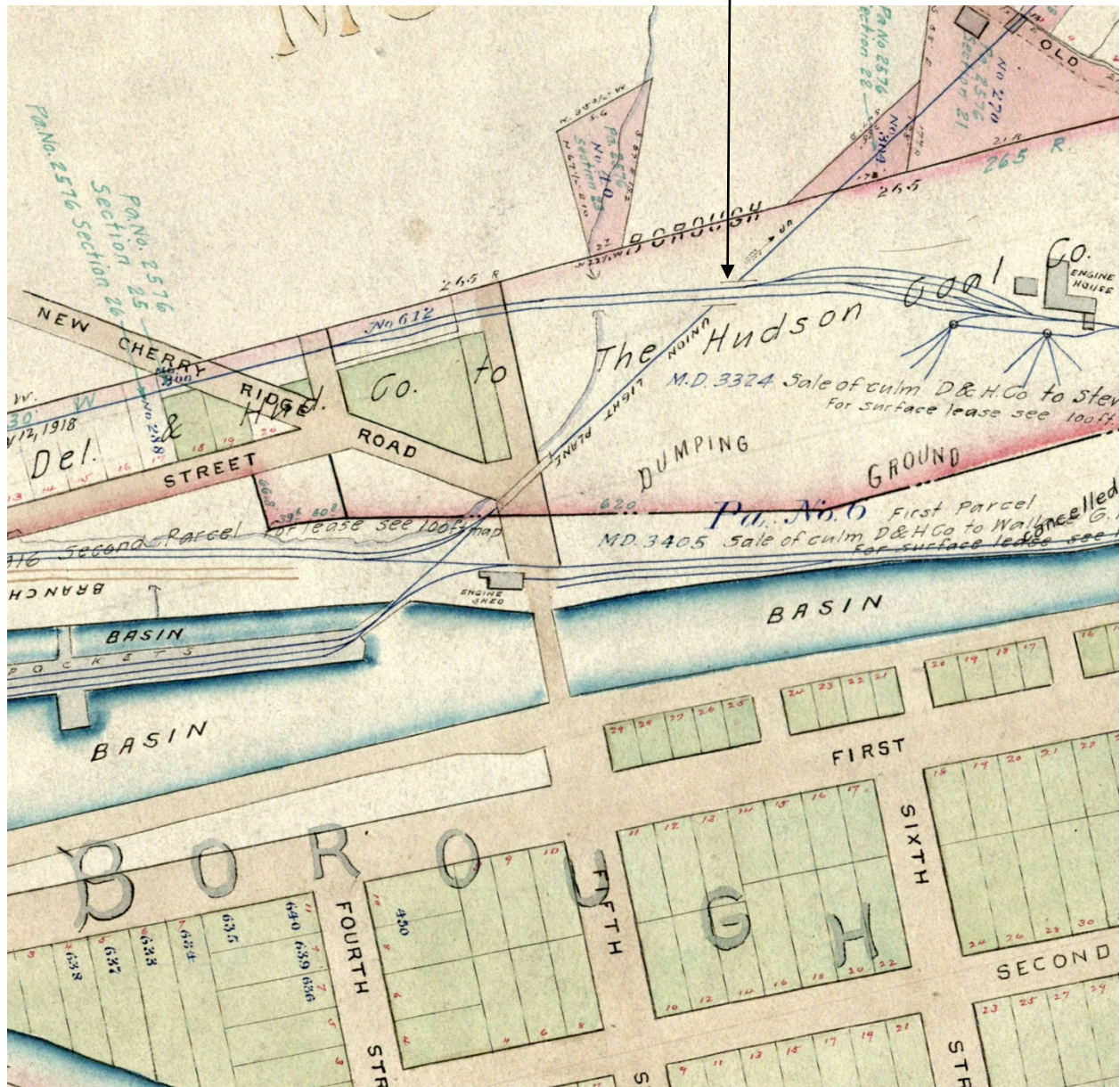
The crossing of the Union Loaded Plane (12 ½) and the Union Light Plane (in downtown Honesdale to the East of D&H Plane No. 13) is seen in the Hensel view (No. 922) given below. When taking the photograph, Hensel was standing on the bridge over the Union Light Plane at the intersection of Fifth Street and the New Cherry Ridge Road. Looking up the hill we see the Union Loaded Plane descending to the left toward the Erie Pockets in East Honesdale. To the right we see the head of the Union Loaded Plane (No. 12 ½) and the dumping ground between that head and the Canal basin, which comes down the hill in the middle distance on the right in this Hensel view.



There are three views named “Views up the Plane, Honesdale” in the Hensel series titled “Stereoscopic Views of Honesdale, PA. Photographed and Published by L. Hensel, Port Jervis, N. Y.” No. 922 is shown immediately above (looking up the Union Light Plane); No. 923 and No. 924 are both views up Plane No. 13 on the D. & H. Gravity Railroad.

Here is that crossing (Union light and Union loaded) as seen on the 1895 D&H Gravity map:

The crossing of the Union light and Union loaded tracks



The head of the Union Light Plane was the same head as that of D&H Plane 13. Here are four views (formerly in the collection of R. B. Whittaker, Liberty, NY; now in the collection of John Revak of Simpson, PA) of the Union's operations.

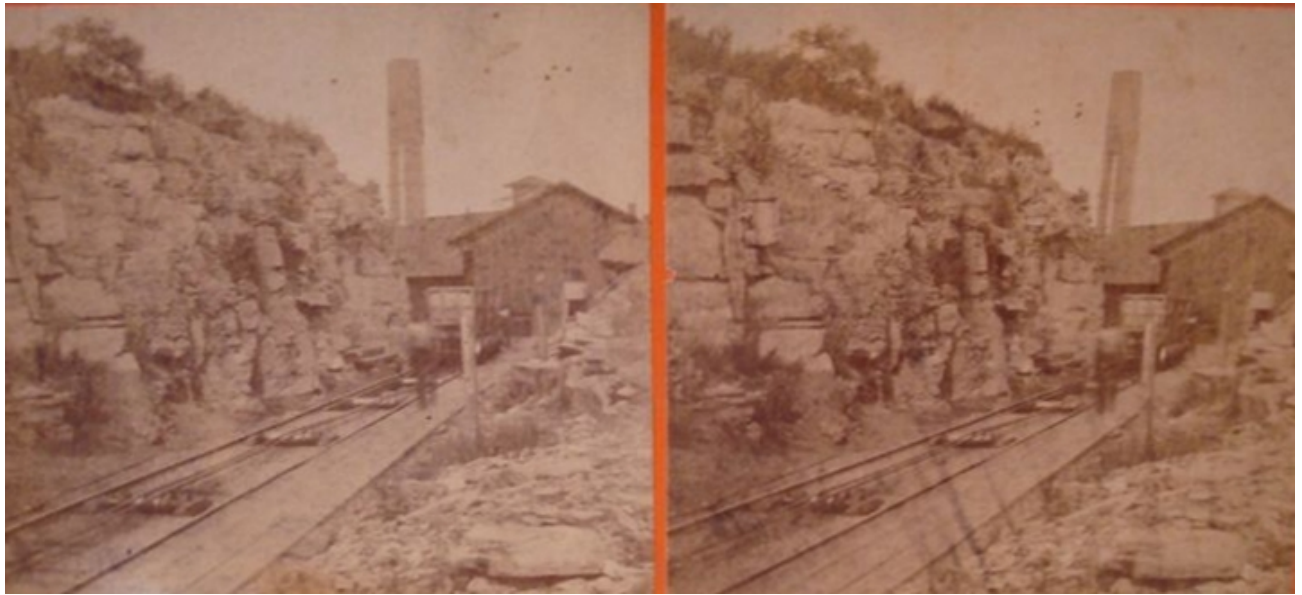
Looking up the Union Light Plane, from near the foot:

The Union Loaded Plane (descending to the left toward the Erie Pockets in East Honesdale) passes over the Union Light Plane.



The Union Light Plane

The Union Light Plane, near the head:



The Union Light Plane, at the level area at the head:

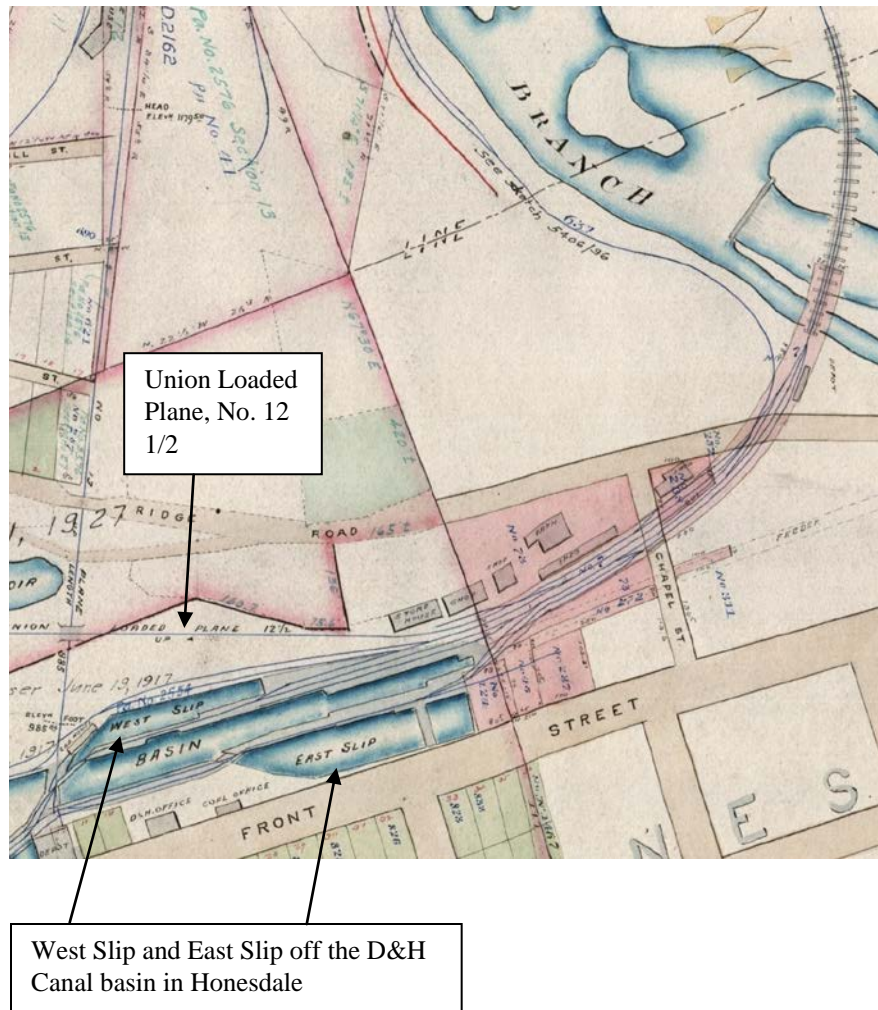


Coal storage:



These are the only known photographs of the Union coal operations and the immediately surrounding area.

D&H Loaded Track into Honesdale (also foot of Union loaded plane, which the D&H also called “12 ½”)
--from 1895 Gravity Map volume

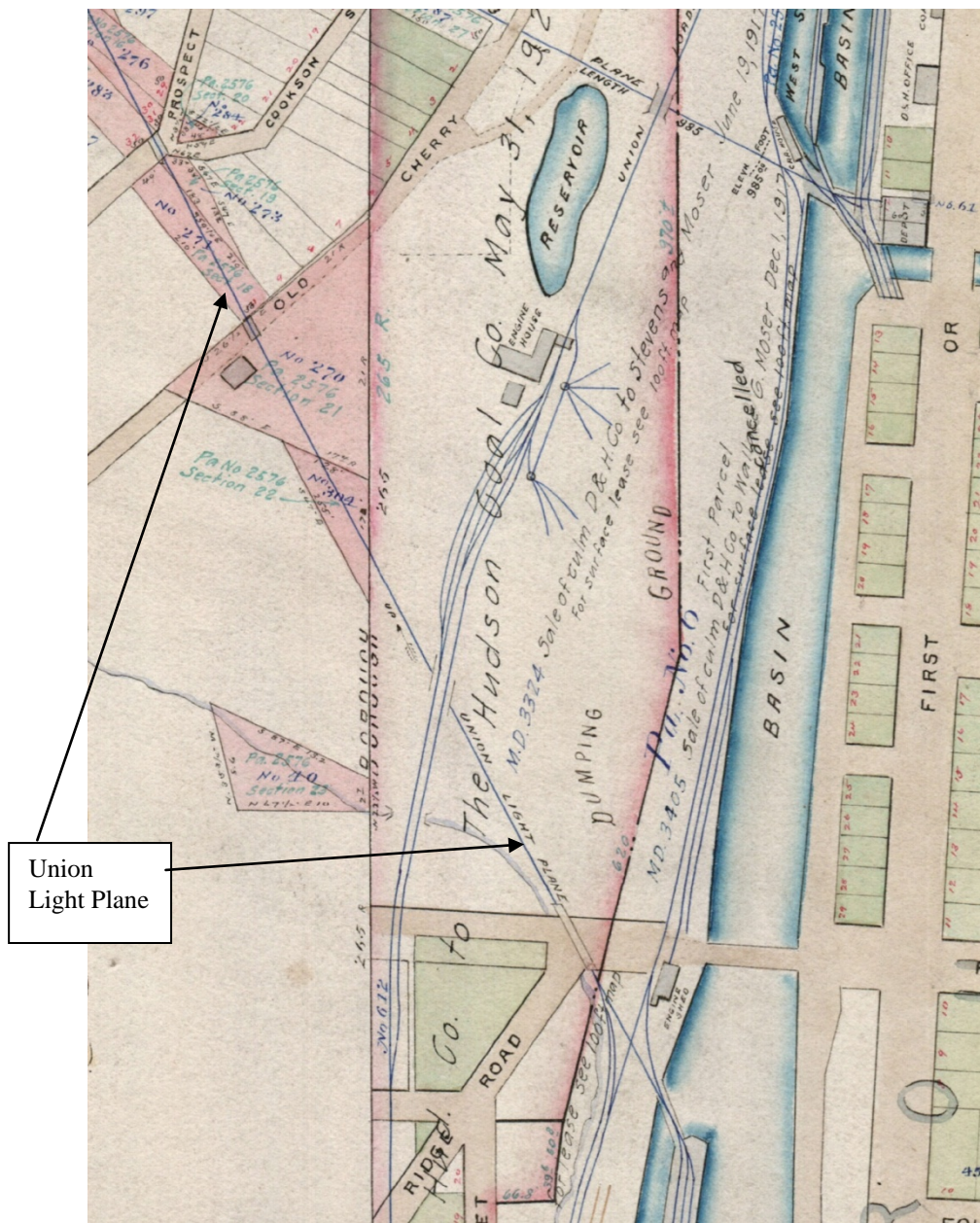


West Slip, East Slip:

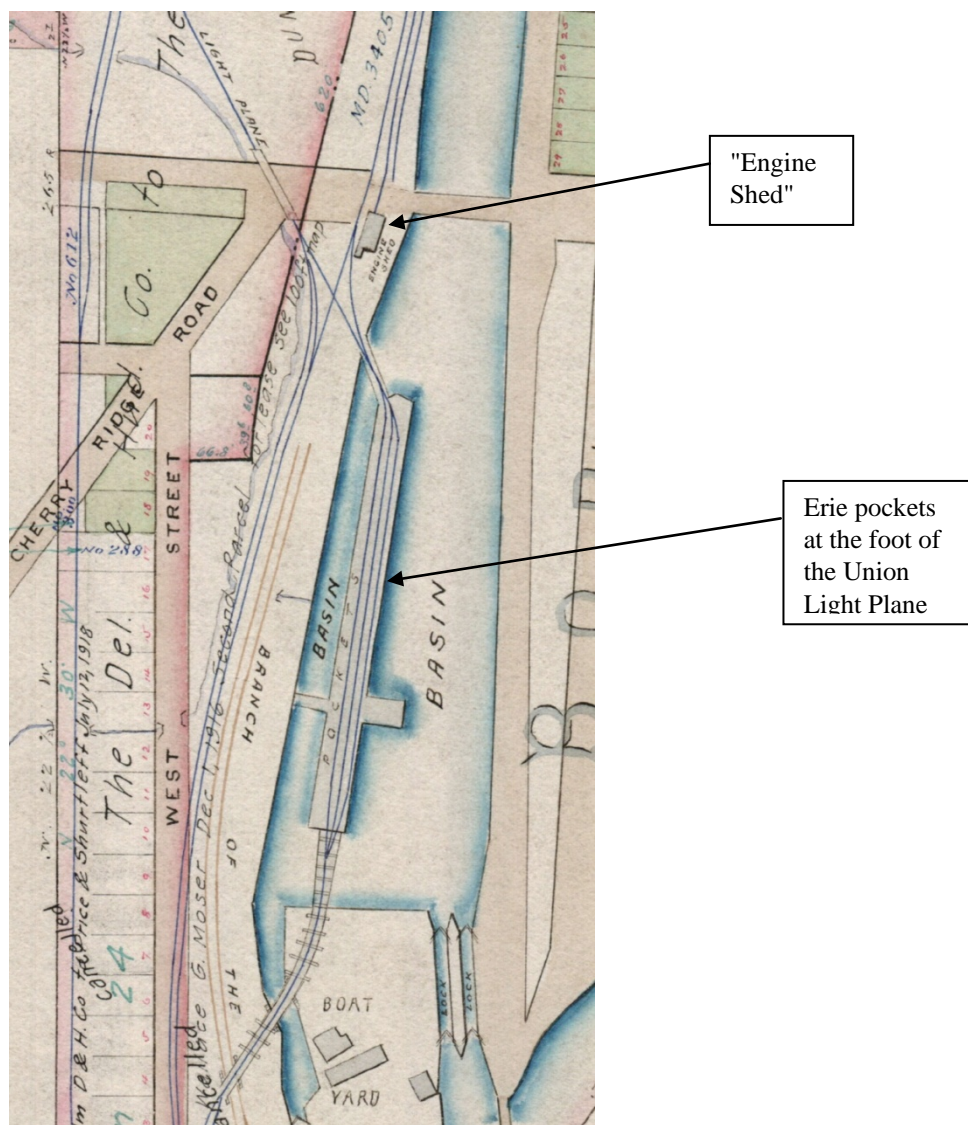
A *slipway* is a ramp on the shore by which ships or boats can be launched or retrieved from the water. They are used for building and repairing ships and boats. Slipways are used to launch (newly built) large ships, but can only dry-dock or repair smaller ships. Presumably, D&H canal boats that had to be repaired were taken into one of these two slips (East and West) off the Canal basin in Honesdale and the necessary repairs were made there.

Note: There was a Boat Yard and Dry Dock in the middle of the lower Canal basin: see p. 315.

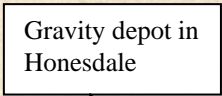
Union Light Plane—which ran from the Erie Pockets to the Head of D&H Plane No. 13:



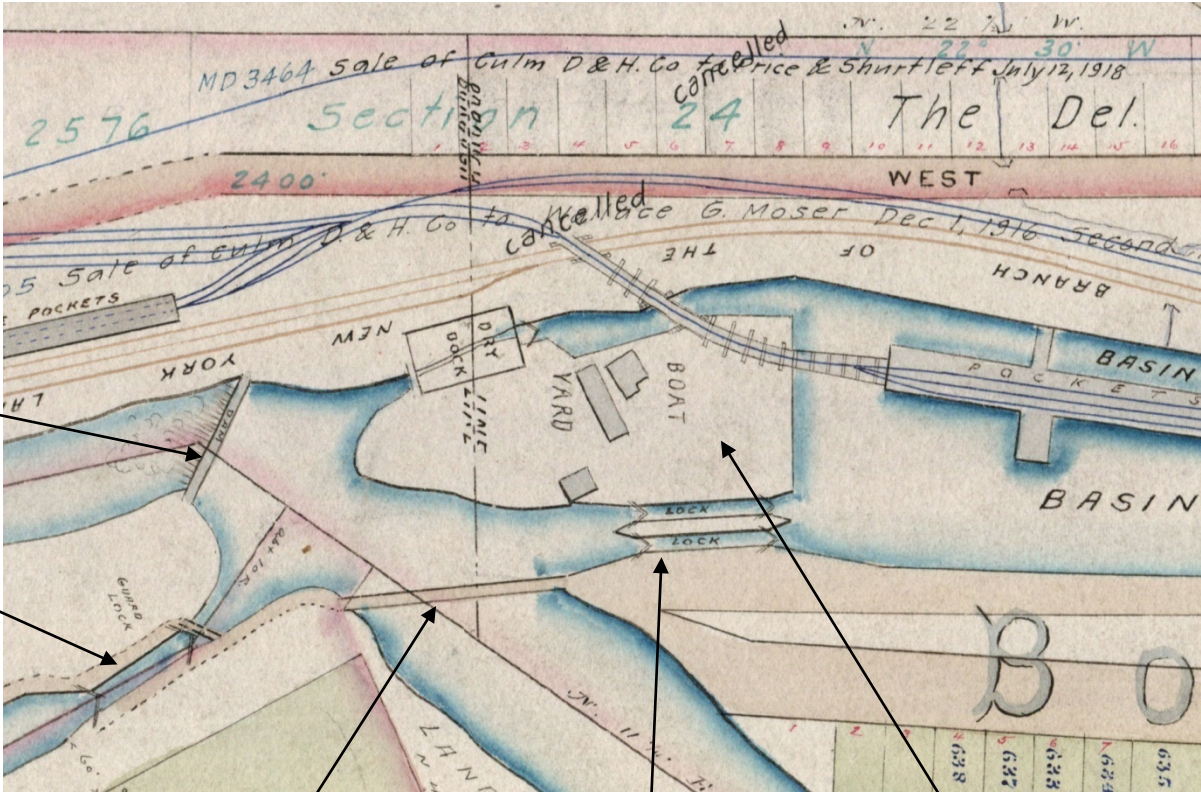
The Erie pockets in the middle of the Canal basin.



There was a dam across the Lackawaxen which forced water into a raceway that fed the D&H Canal at its head.



The lower end of the D&HG Canal basin:



Dam on the
Lackawaxen
to encourage
water to
flow into the
Canal

The guard
lock at the
head of the
Canal

The towpath bridge
over the
Lackawaxen River

The double lock at the lower end of the Canal basin

Boat Yard and Dry
Dock in the middle
of the Canal basin

Here is a photo by the author of the line drawing by Manville B. Wakefield of the double lock, Locks 37 and 38, at the lower end of the canal basin in Honesdale. This original line drawing is in the collection of the D&H Canal Historical Society and Museum in High Falls, where the author photographed it on 10-23-2013.

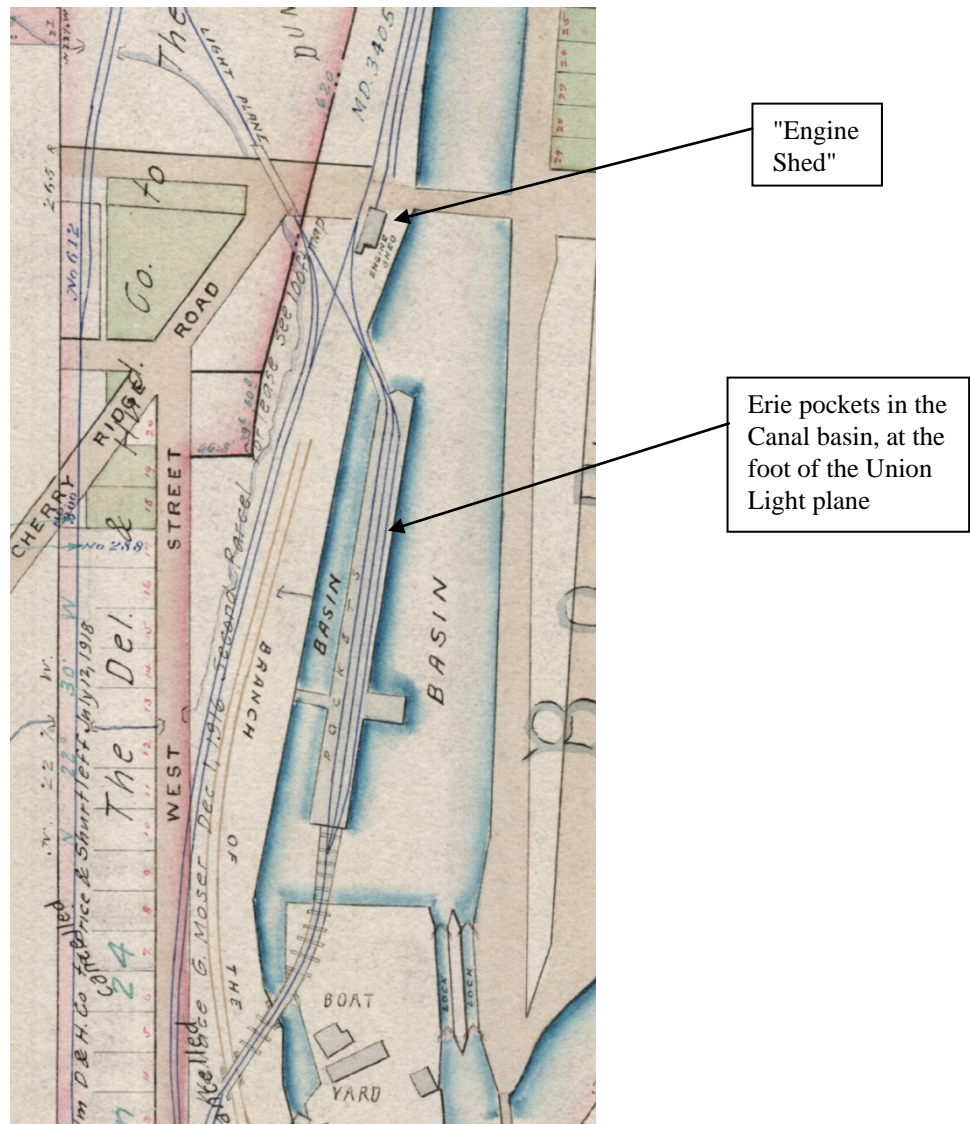


The D&H Canal in 1880: 107 locks, including double lock at Honesdale; 2 weigh locks, 2 stop locks, 2 guard locks, 22 aqueducts (4 wire suspension and 18 wood trunk); 110 waste weirs; 2 dry docks (leased, not operated by D&H), plus numerous privately owned dry docks; 14 canal feeders; 16 feeder dams; 136 highway and farm bridges; 37 towing path bridges (one 5-span wrought iron bridge crossing Lackawaxen at Honesdale), 26 crossing aqueducts, 10 crossing feeders; 22 reservoirs; boats built by D&H: 915 canal boats, 66 transfer boats, 3 freight line boats, 16 barges, 2 wrecking boats, 1 propeller boat, and 1 dredging machine (there was also an uncounted number of privately built boats on the canal).

6832

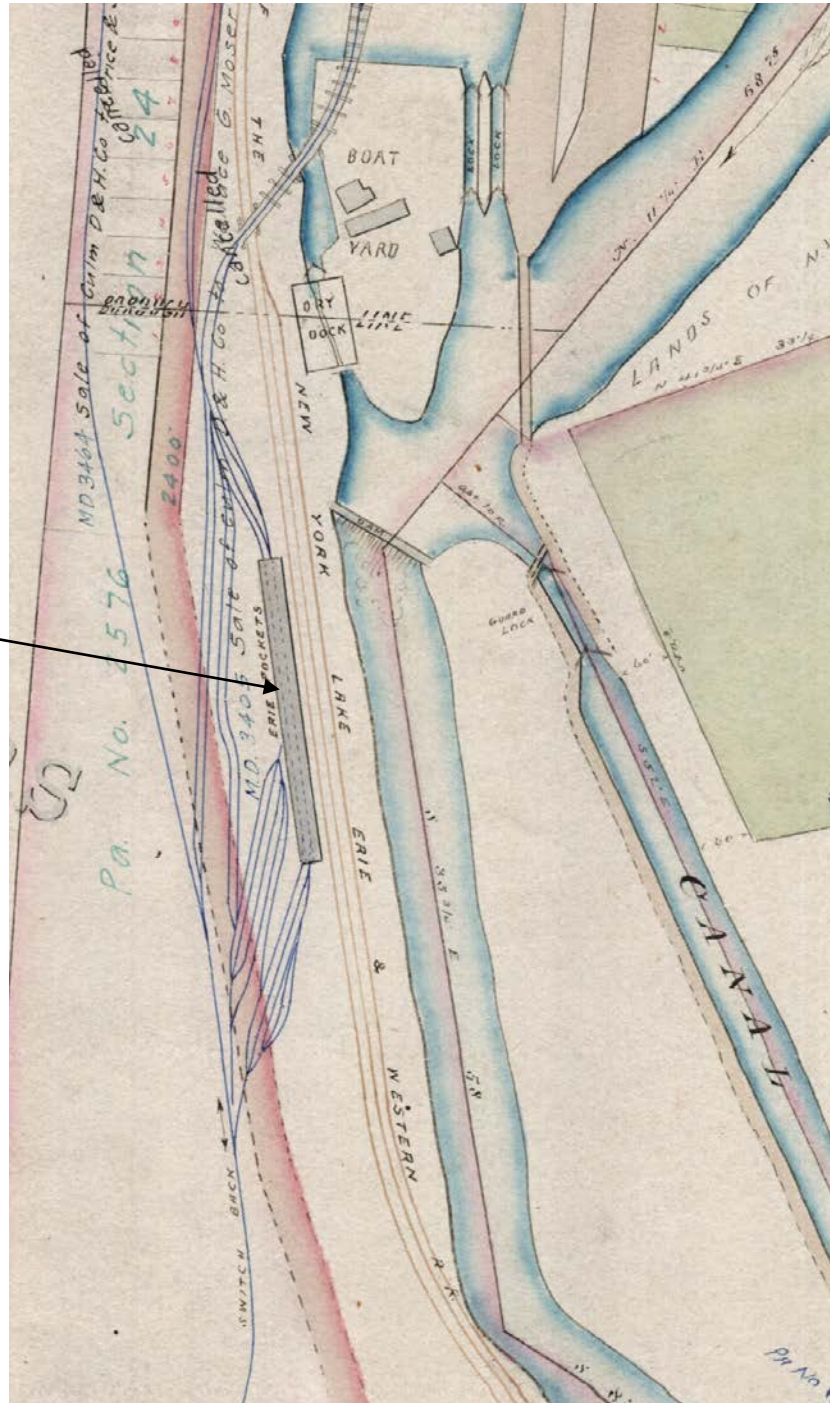
4. Erie Pockets: three details

Erie Pockets in Canal Basin:



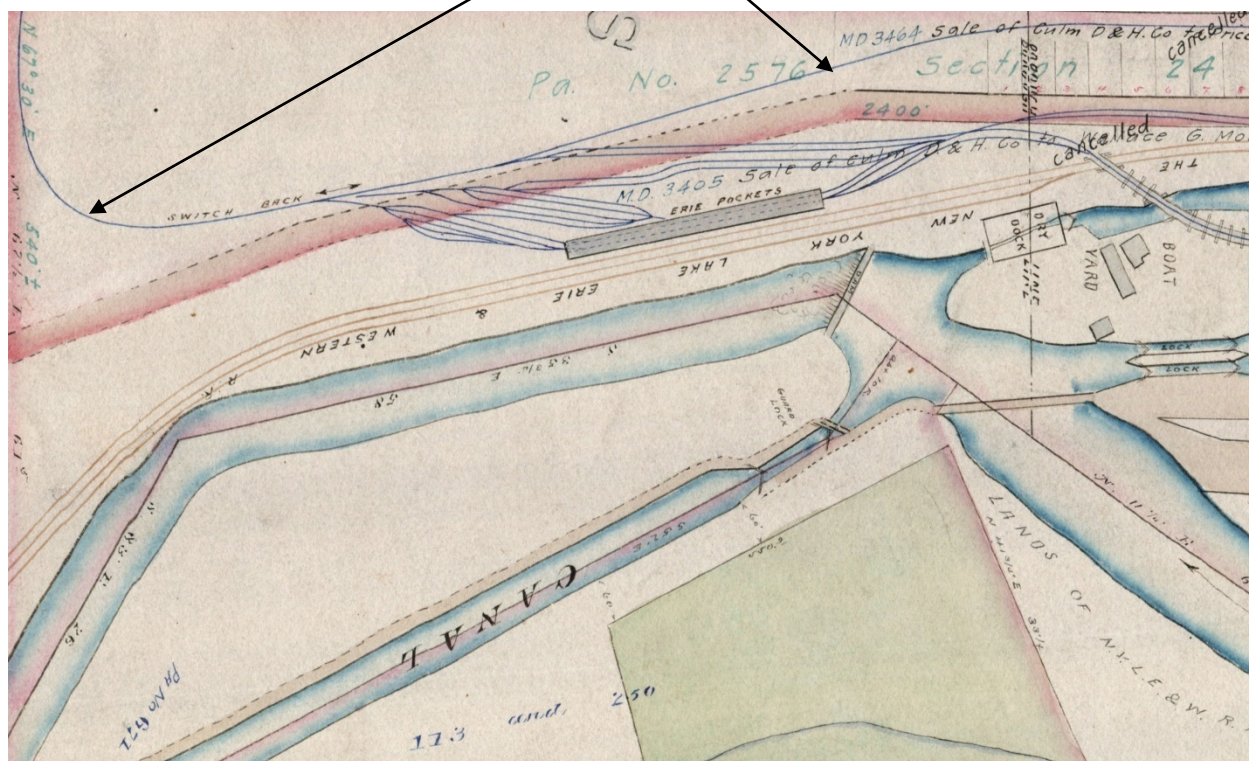
Erie Pockets in South Honesdale:

Erie pockets
in South
Honesdale



Switchback from Erie Pockets

Switchback from Erie Pockets



6833

5. Union Docks

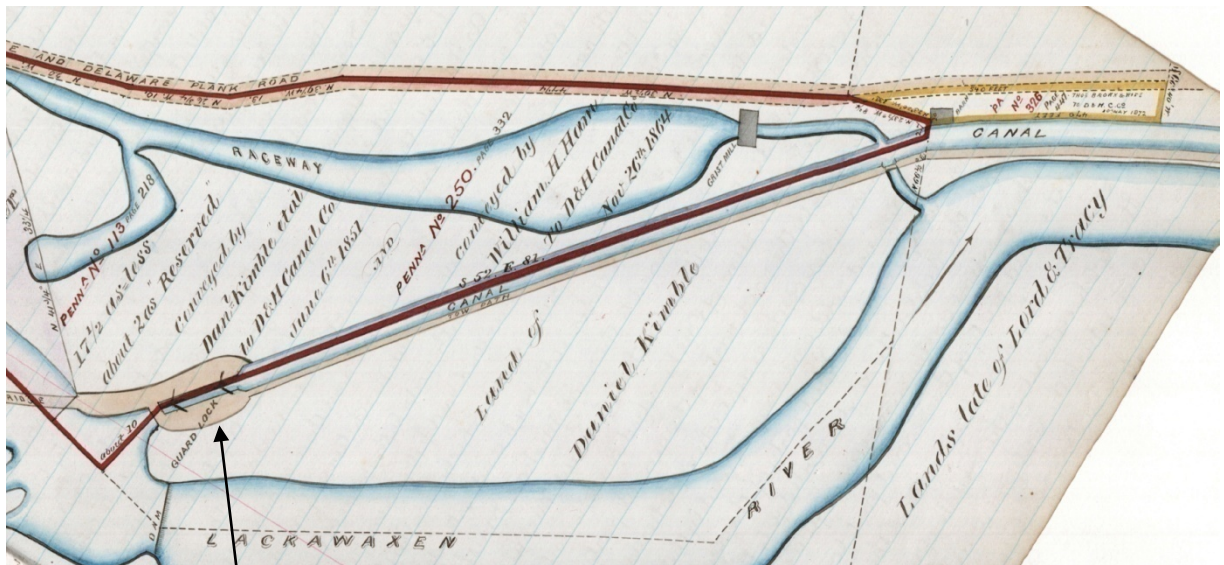
New planes and works of the Union Coal Company, 1867:

1867: "The first cars passed over the new planes and works of the Union Coal Co., in this borough, on Wednesday last." (*Carbondale Advance*, Saturday, August 3, 1867, p. 3)

Hensel No. 902: *Irving's Cliff, from Union Docks* (from the Hensel's Honesdale series 900-958)
Irving Cliff is in the background, on the right. The Union Docks were located just below the Terrace Street/Fifth Street Bridge on the west side of the canal basin. The coal cars on the wooden trestle are empties returning from the Erie Pockets to the foot of the Union Light Plane. The bridge in the background, crossing the entire width of the canal, is the Terrace Street/Fifth Street Bridge. The original of this stereocard is in the collection of the Carbondale Historical Society.



A detailed view of this section of the canal is given on the map on page 221 that illustrates the deed, dated June 6, 1851, between Daniel Kimble and wife / Benjamin F. Kimble and wife and The Delaware and Hudson Canal Company. The deed is on pages 218-220 of D&H Deeds PA, in the collection of the Carbondale Historical Society.



Guard lock at the
beginning of the
D&H Canal

Here is a map view from the 1895 Gravity Railroad map of the arrival area of the loaded track in Honesdale:



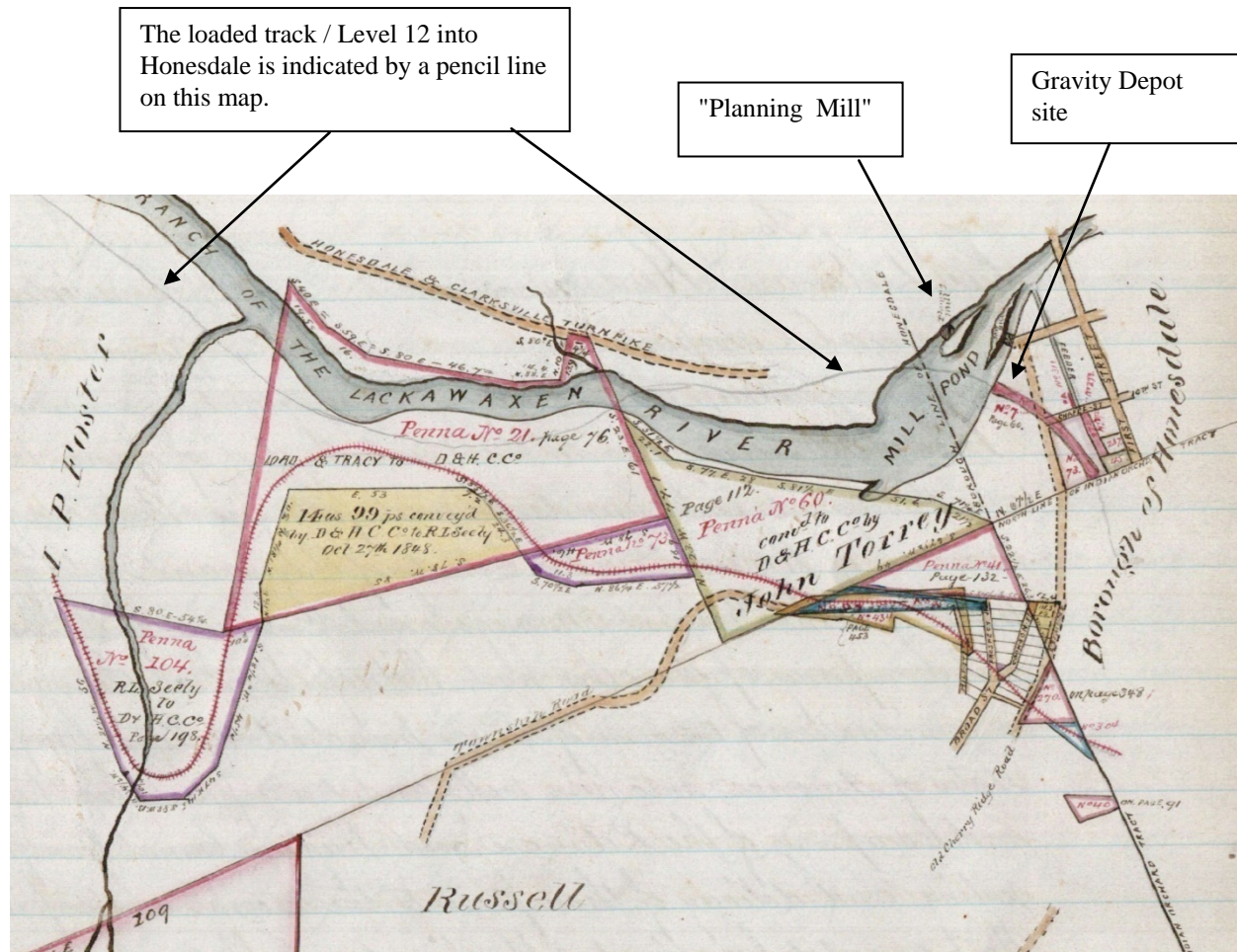
The Gravity depot at Honesdale, we learn from the article given below, was 25 feet long and was opposite the Honesdale mill.

“The Del. & Hud. Canal Co. are putting in the foundation for a building, some 25 feet long, opposite the Honesdale mill, to be used as a Gravity depot, all of which will prove a great convenience and comfort to travelers.” (*Carbondale Advance*, August 25, 1883, p. 3)

In 1869, Mrs. Bingham was seriously injured there:

“A Mrs. Bingham was seriously injured on Monday of last week, in the head and hip, at the Honesdale Depot, by a car attached to a train which was being switched, striking her.—*Honesdale Citizen*.” (*Carbondale Advance*, April 17, 1869, p. 3)

Both the Gravity Depot site and the Honesdale mill (“Planing Mill”) are shown on the map given below that illustrates the deed, dated May 25, 1845, between John Sayre and others and The Delaware and Hudson Canal Company. This deed is given on pages 93-94 of the D&H Deeds PA; the map is on page 95:



6835

Planes No. 13-17, revisions; Planes 18-20

Highly significant modifications and additions were made to the light track at the time of the 1868 configuration (installation of latches on Levels 13 and 14; Planes 18, 19, and 20 added), and we will have a look at them in detail.

6836

Plane No. 13

--985 feet long (rise 194.50 feet); the steepest plane in the system (see below)

--Level 13: 14,238 feet long (fall 126.18 feet)

--in the engine house at the head of Plane No. 13 there were nine boilers, arranged in nests of three; from 8 to 12 tons of buckwheat coal were shoveled into the three fire boxes daily.

--in this engine house there were two engines, one for Plane 13 and the other for the Union Plane coming up from the Erie Railroad coal pockets.

“Altitudes Again. / We are indebted to O. D. Shepherd, Esq. Chief Engineer of the D. & H. C. Co. of this city, for the following elevations, omitting fractions, above tide water, of various points on the Gravity R. R. of the Company: Foot of No. 13 Plane, Honesdale, 985. (*Carbondale Advance*, September 17, 1870, p. 3)

In the two articles given immediately below, Plane No. 13 is identified as the steepest plane in the system. Elsewhere, I have read that Plane No. 5 (1859, 1868 configurations) was the steepest. Here are the numbers: Plane No. 13: 985 feet long (rise 194.50 feet). Plane No. 5: 1,294 feet long (rise 130 feet). Looks to me like Plane No. 13 was steeper than Plane No. 5

Here is the first to those two articles, which is about an accident on Plane No. 13 in April, 1891, in which Plane No.13 is identified as the steepest plane in the system:

“GRAVITY CARS BREAK LOOSE. / A Link Lets the Passenger Train Down the Steepest Plane. / Yesterday afternoon as the gravity passenger train was leaving Honesdale at 1:20 and had passed the first ‘latch’ on the plane—about 100 feet from the foot, a link in the rope-chain broke, letting the cars back like a shot. The latch threw a truck of the baggage car off and wrecked the car so that it had to be abandoned. When the chain snapped the brakes were applied as soon as possible, but not in time to do any good. / Fortunately, the connections between the cars held, and the baggage car served as a drag on the passenger cars, which remained on the rails. At the foot of the plane, one truck of the derailed car ran into the shieve-pit, and the train was brought into a halt. Nobody was hurt, and the passenger cars were promptly forwarded by way of the Union plane. / Some of the passengers were thoroughly shaken up and all were badly frightened, but after assurance by the conductor they continued on their journey. The accident was one that could not have been prevented.” (*Evening Leader*, April 9, 1891, p. 4)

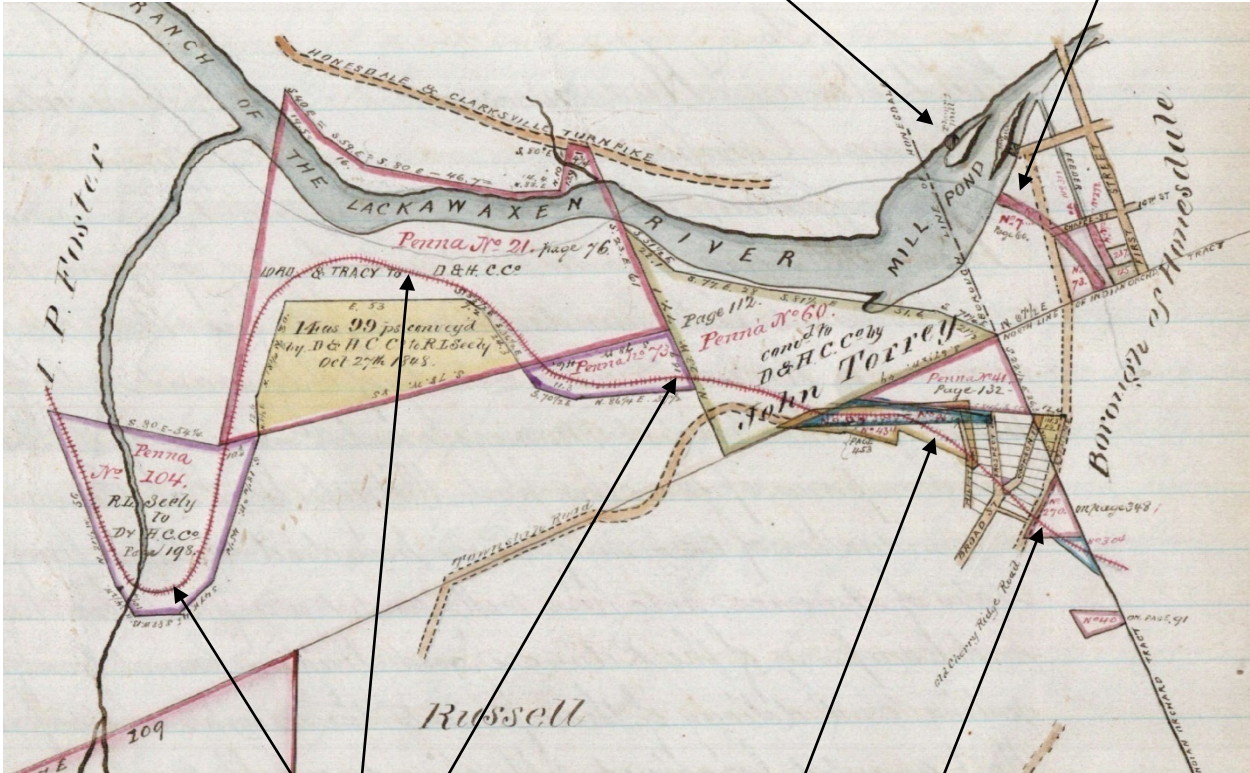
Here is the second of those two articles, this one about the railroading career of Edward F. Baird. Most interestingly, we also learn from this article that only seven empty coal cars or three coaches could be hoisted up Plane No. 13 at a time.

"After two years as a switchman [in 1882], Mr. [Edward F.] Baird became headman at the top of Plane 13, the first incline on the Honesdale-Carbondale line, and the steepest on the Gravity. Only seven empty coal cars or three coaches could be hoisted up at a time. It was his duty to disengage the cable as the cars broke over the top of the plane, then make up trains of from 48 to 72 cars for the run to Waymart. / Occasionally the cable broke under the weight of a train. In anticipation of such accidents, spring derails were installed at intervals in the plane, so arranged as to permit cars to pass upward but derail cars descending the incline. When a cable did break, most of the ascending trip were demolished, although this was infinitely better than to let them run wild down the plane with consequent danger to persons and property at the foot of the plane. . . After ten years as headman Mr. Baird was made stationary fireman at the head of Plane 13. Reporting for work at 4 A.M., he had to get up steam on the nine boilers, arranged in nests of three. During the course of a busy day he wheeled in from the storage pile and shoveled into the three hungry fireboxes from 8 to 12 tons of buckwheat coal. At this engine house there were two engines, one for Plane 13, the other for the Union Plane coming up from the Erie Railroad coal pockets. / Signals were transmitted from the foot of the plane to the engine house by means of a bell wire strung on poles beside the track. By pulling on the wire at any point in the length of the plane a bell would be rung in the engine house. One ring was the signal to start the engine, two meant stop, while four were to back up. / In November 1903, he was transferred to the steam railroad at Carbondale as a locomotive engineer. / During the 31 years prior to his retirement on pension September 1, 1933, he worked on practically every run on the Pennsylvania Division as well as on through freights to Oneonta. / Mr. Baird is a member of The Delaware and Hudson Veterans' Association. He and Mrs. Baird, who live at 27 Wyoming Street, Carbondale, have been married 48 years. They have one son, Thomas, who lives with them." (*The Delaware and Hudson Railroad Bulletin*, August 1, 1935, pp. 115-16, 125)

All of Plane 13 and the beginning of Level 13, including the portion around the Horseshoe Curve, are shown on the map that illustrates the deed, dated May 25, 1845, between John Sayre and others and The Delaware and Hudson Canal Company. This deed is given on pages 93-94 of the D&H Deeds PA; the map is on page 95:

The "Honesdale mill" referred to in the notice given on page 323.

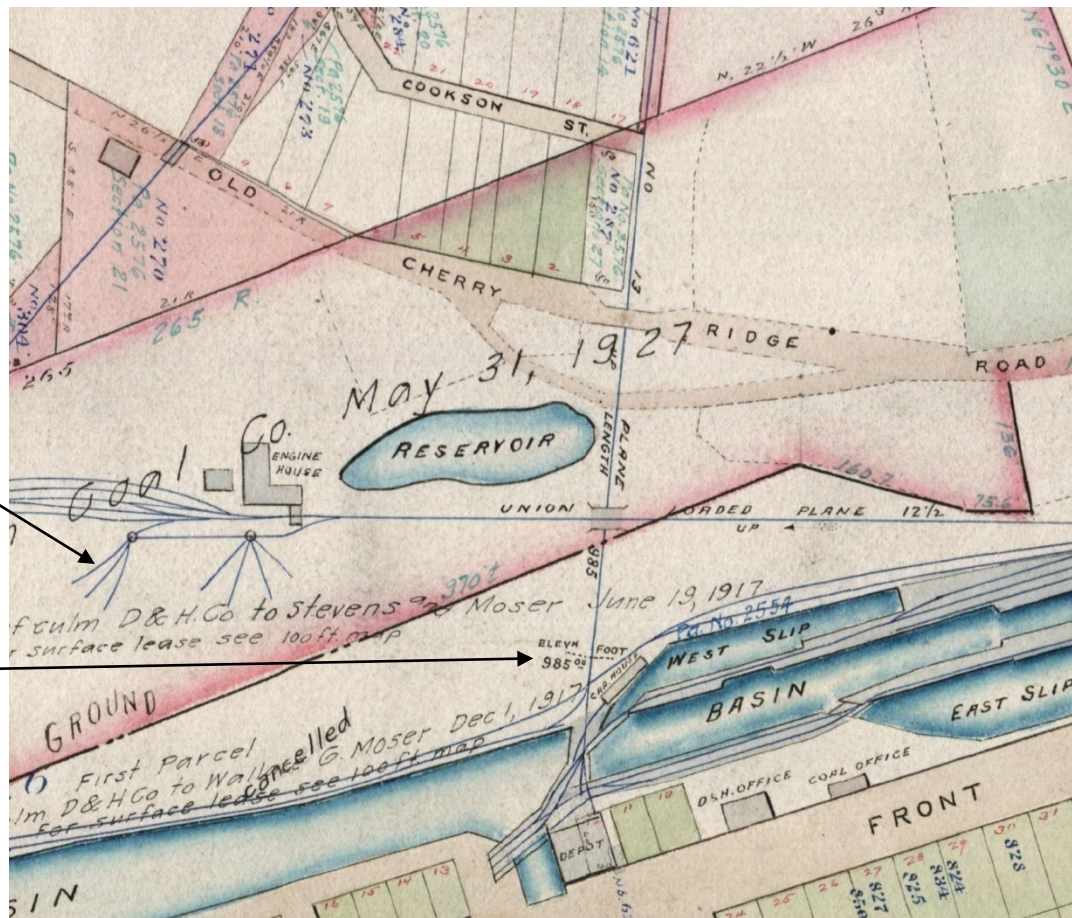
Location of Gravity Depot at Honesdale, 1883



Level No. 13

Plane No. 13, light track,

Foot of Plane No. 13 from the 1895 Gravity Railroad map volume:



Dumping ground above D&H Canal basin

Foot of D&H Plane 13, 1843, 1859, 1868

Union Loaded Plane No. 12 1/2

The dumping ground in the shape of radiating spokes above the basin that is shown on the map given above is seen in the photograph (J. A. Bodie, Honesdale, PA) given below in the archives of the Wayne County Historical Society. On the back of this photograph is written: "View of Coal Pile Dumping Ground from Head of No. 12 1/2 Plane, Honesdale, Pa." Note that the plane up which the loaded coal cars passed to get to this dumping ground is named "Union Loaded Plane 12 1/2" on the map given above. This plane crossed, at right angles, D&H Plane No. 13 between the foot of the plane and the Old Cherry Ridge Road (which passed over Plane 13 on its way up the hill). Wakefield reproduces this photo on page 57. Wakefield's source of this photo is the Ellenville Public Library. Wakefield's caption reads as follows: "The loaded cars were rolled by hand out to the turntable where they were shunted out to the ends of the coal piles for dumping."

Coal was dumped in these piles during the winter when the canal was frozen over and at other times when more coal was arriving in Honesdale than could be shipped immediately. This dumping ground was on a side track off the Union Loaded Plane 12 ½, which carried loaded coal cars to the Erie Pockets in East Honesdale.

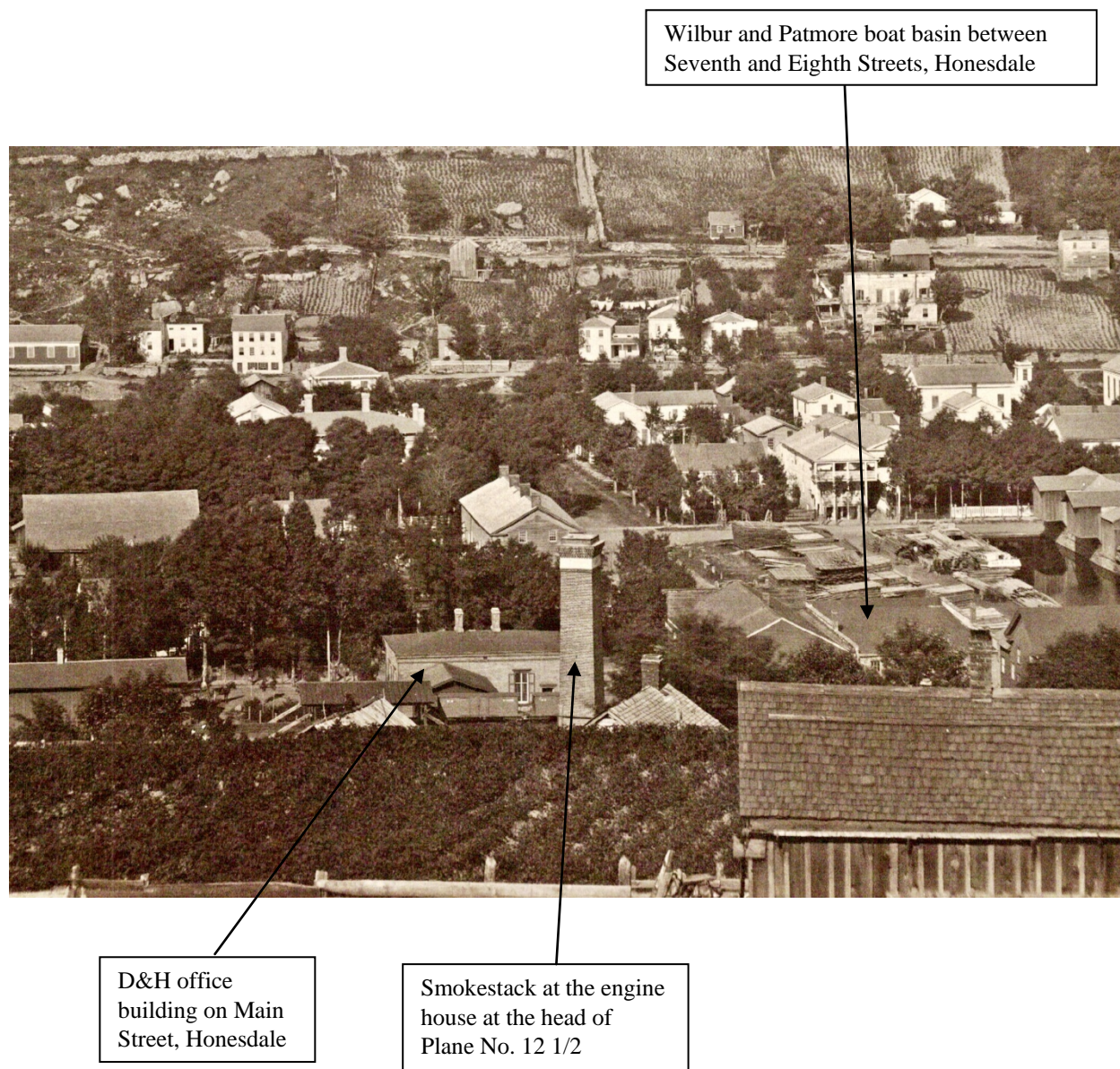
“View of Coal Pile Dumping Ground from Head of No. 12 ½ Plane, Honesdale, Pa.” by J. A. Bodie, Honesdale, PA; photo in the archives of the Wayne County Historical Society.



Sprag inserted into the wheel of a Gravity coal car to prevent the car from moving.

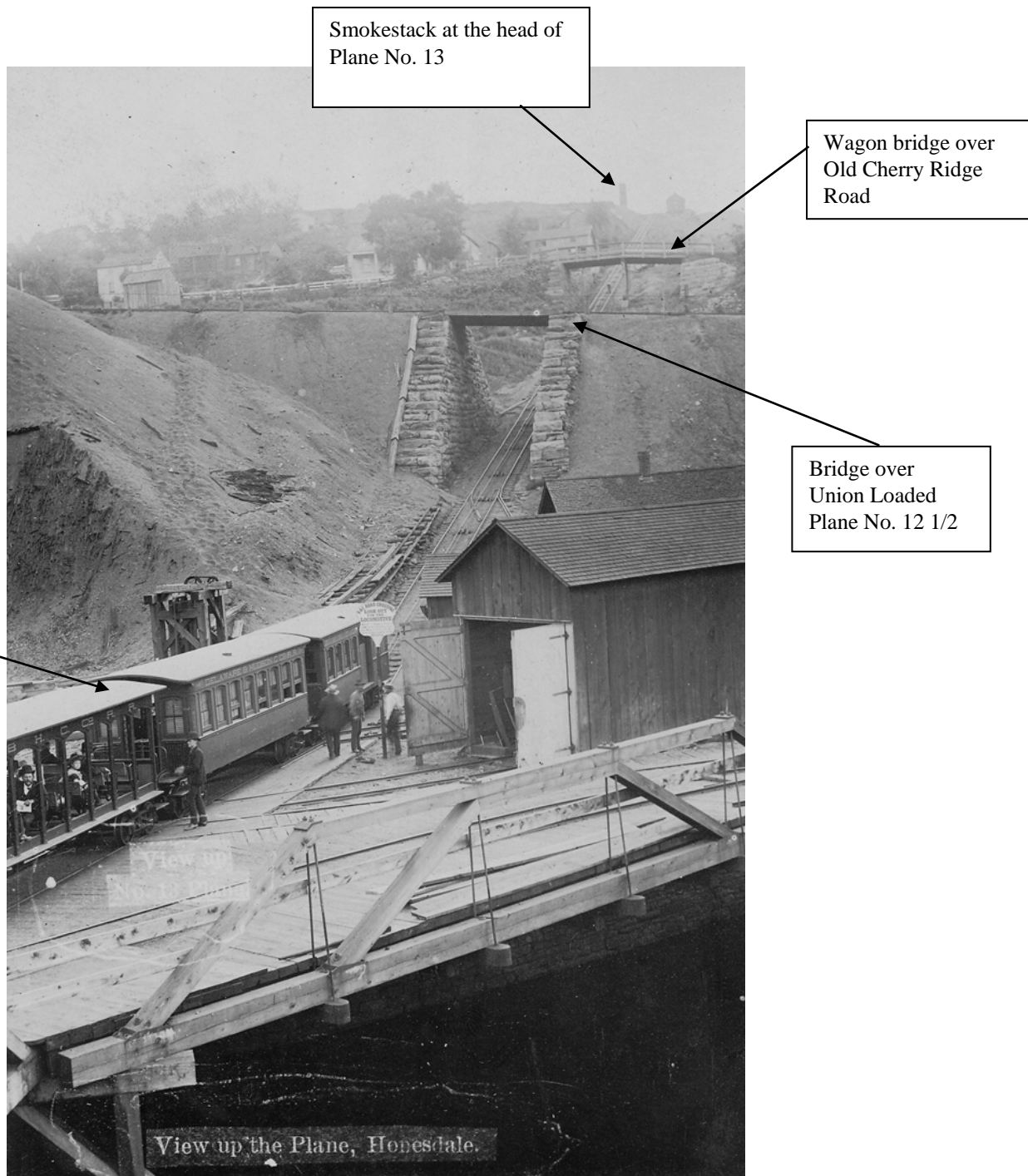
The smokestack on the engine house for Plane 12 ½ can be seen in the photograph given below of Honesdale that was taken by Johnson (Scranton, PA) in 1860. The photograph, one of 32 photos in the series, given below is a detail from “Honesdale, / (Section 3,) / Del. and Hudson Canal Co.” The view in this photograph is from up on the hill above the dumping ground, looking down into Honesdale.

“Honesdale, / (Section 3,) / Del. and Hudson Canal Co.”, photo by Johnson, 1860, in the collection of the Wayne County Historical Society.

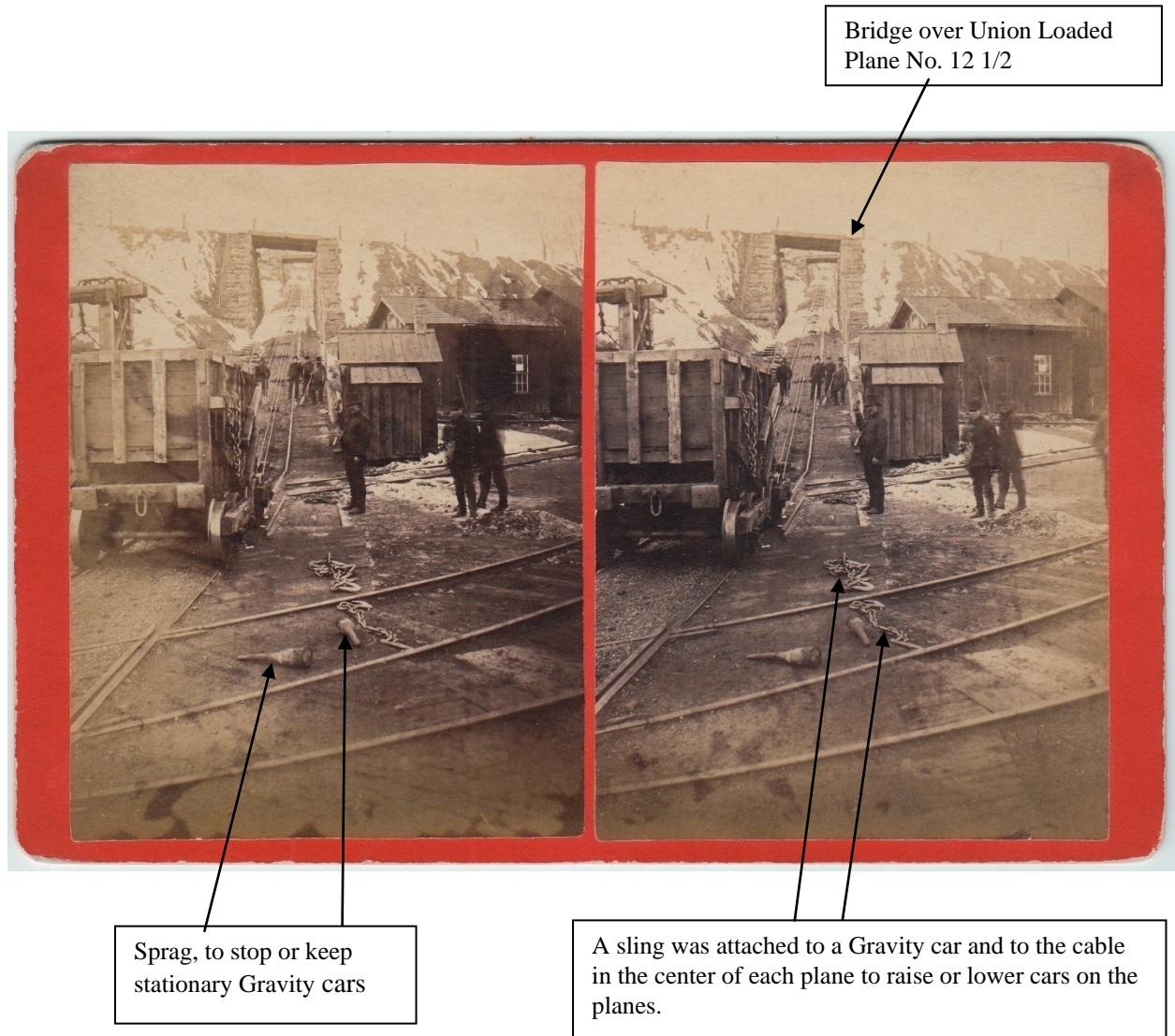


*View Up the Plane, Honesdale from Orig. Photo Souvenir of Del. & Hud. Gravity Road.
Published by L. Hensel, Hawley, PA.*

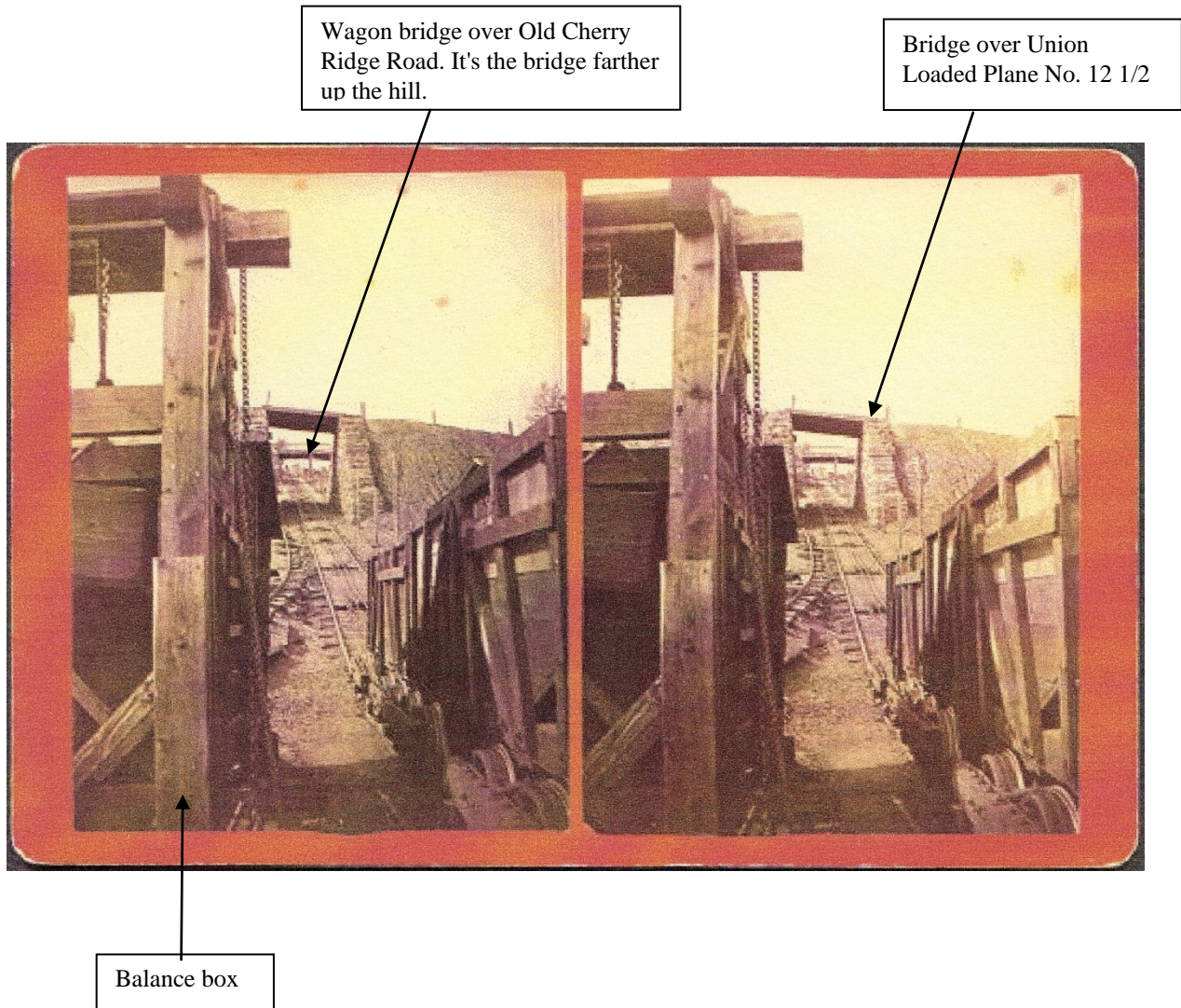
The first bridge under which the plane travels is the Union Loaded Plane (up which cars were pulled from right to left, where the engine house (not seen in this photo) was located; see map above; the second bridge is the Old Cherry Ridge Road bridge over the plane). The Union “light” plane, which was powered by an engine at the head of the D&H’s Plane 13 (see Union Plane herein) went from the head of Plane 13 down across the hill to the East to the Erie Pockets.



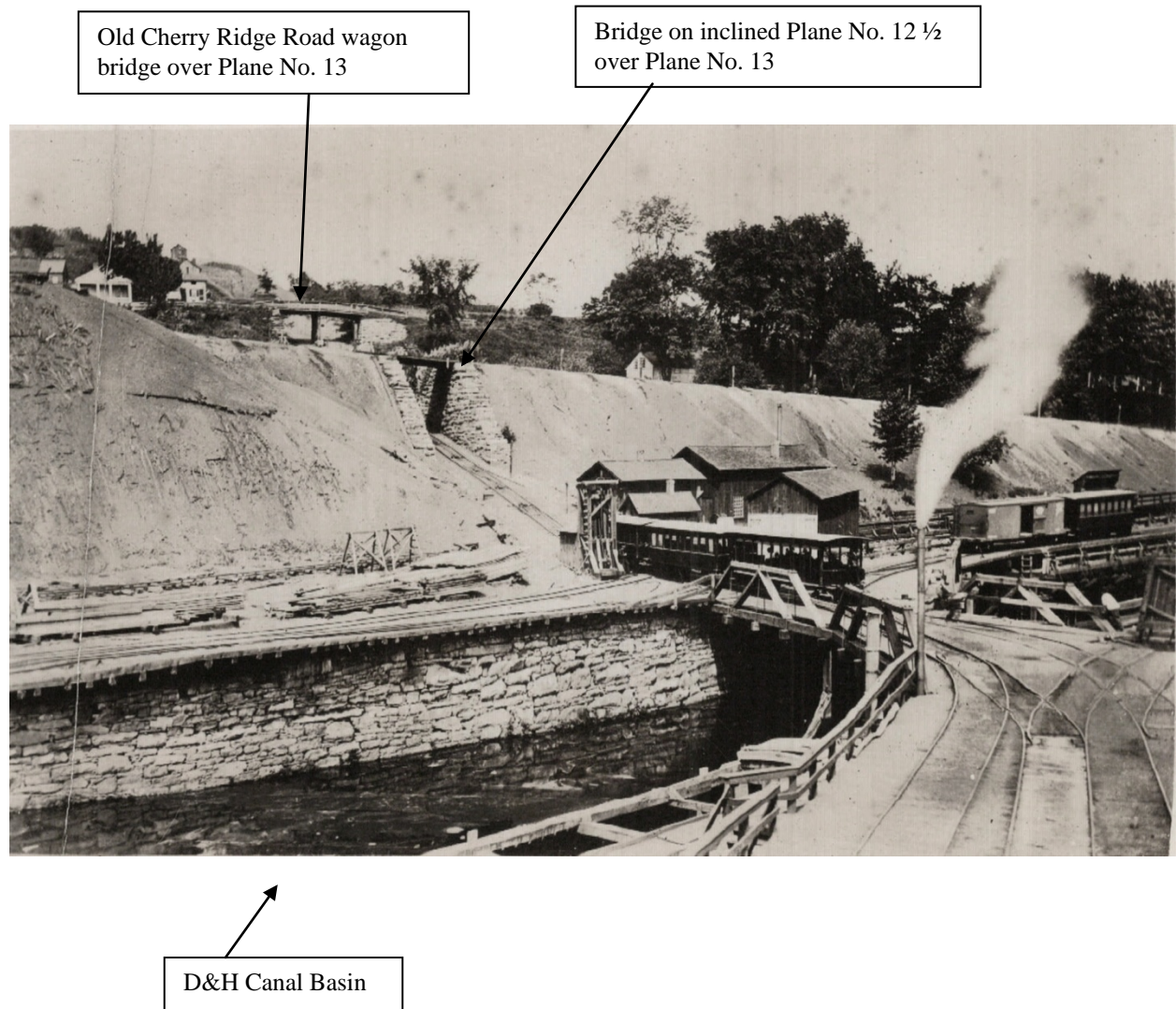
Hensel stereocard No. 923: “*View Up the Plane [No. 13], Honesdale*” from “Stereoscopic Views of Honesdale, PA. Photographed and Published by L. Hensel, Port Jervis, N. Y.” Note the slings and sprags on the ground in the center foreground.



Shown below is another Hensel view up D&H Plane No. 13. This Hensel is in the archives of the Minisink Valley Historical Society, where it is identified as “923 View up the Plane, Honesdale.” It is not “923” in the Hensel series referenced in the stereocard immediately above. It is, nevertheless, certainly No. 13, and certainly a Hensel.



Here is another view looking up Plane No.13 at Honesdale. The original of this photograph is in the archives of the Pike County Historical Society, Milford, PA.



W. E. Anderson Talks about How the Planes Were Operated

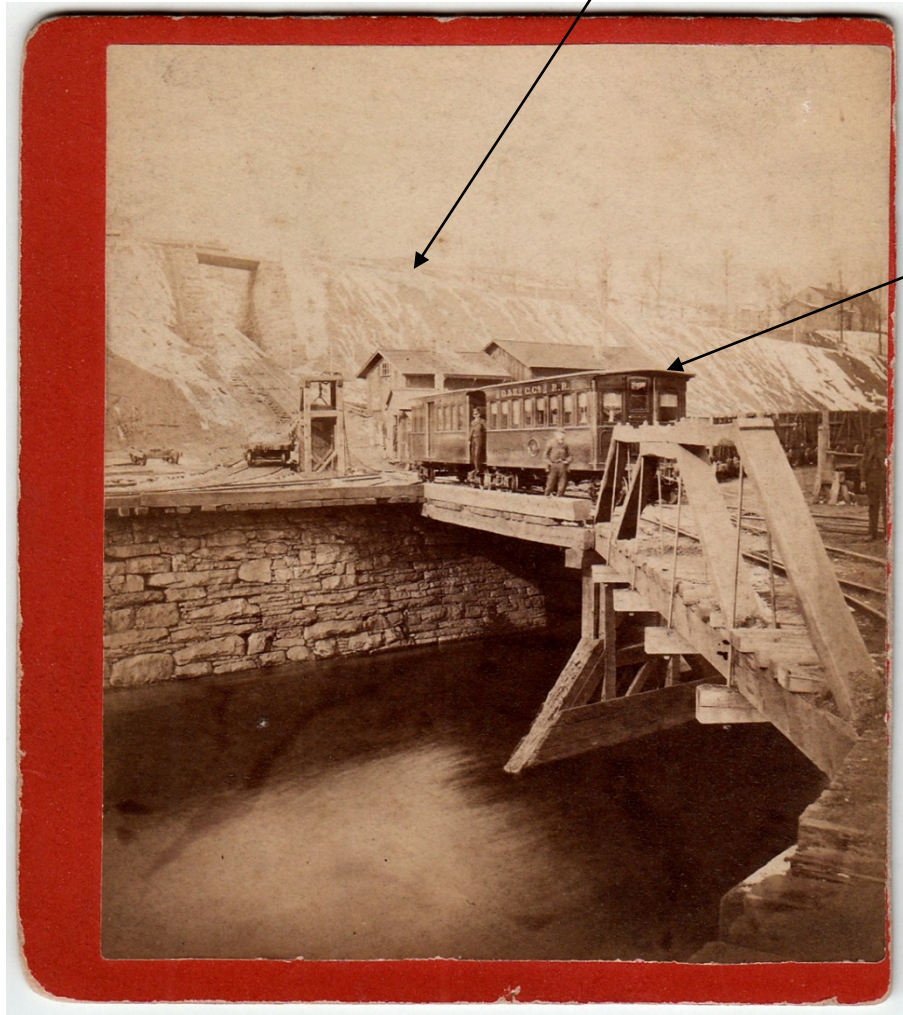
“In operation, the planes were a distinct departure from the planes later constructed at Mauch Chunk and at Portage. The cars to be raised or lowered were attached directly to the cable by means of a short piece of chain known as a ‘sling,’ no ‘safety car’ nor barney truck being used. An endless cable passed over small sheaves, located in pairs, between the rails, which revolved in opposite directions. Large sheaves around which the cable turned were located beyond the top and foot of the planes. The sheave at the lower end was on a moveable carriage, which, a cable

attached to a 'balance box,' took up the slack when a train was attached to the main cable, and kept it taut. A large drum, usually located at the head of a plane and in line with the track, controlled the movement of the main cable which was wound around it. The main cable was in two sections, one-half being a heavy section, one and one-quarter inches in diameter for controlling the trains, and the other half, known as the 'tail rope,' being one of smaller diameter or an old main cable. The drums could revolve in either direction, and, one end of the main cable being at the opposite end of the plane from the trip of cars which it had raised or lowered, continuous operation was obtained upon a single plane."

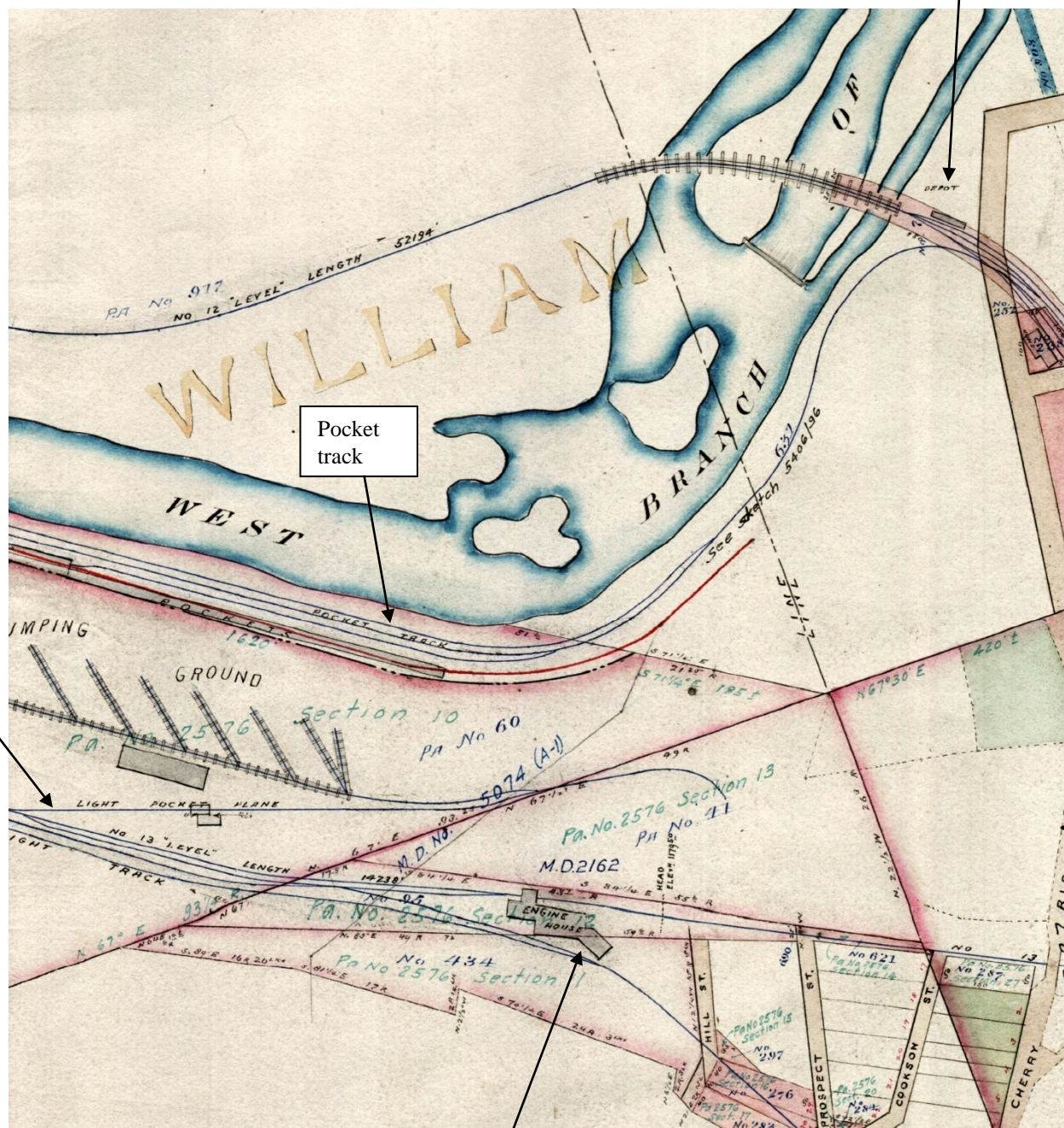
Hensel stereocard No. 924: “*View Up the Plane [No. 13], Honesdale*” from “Stereoscopic Views of Honesdale, PA. Photographed and Published by L. Hensel, Port Jervis, N. Y.”

Union Loaded Plane
No. 12 1/2

A cut of
passenger cars
about to be taken
up Plane No. 13

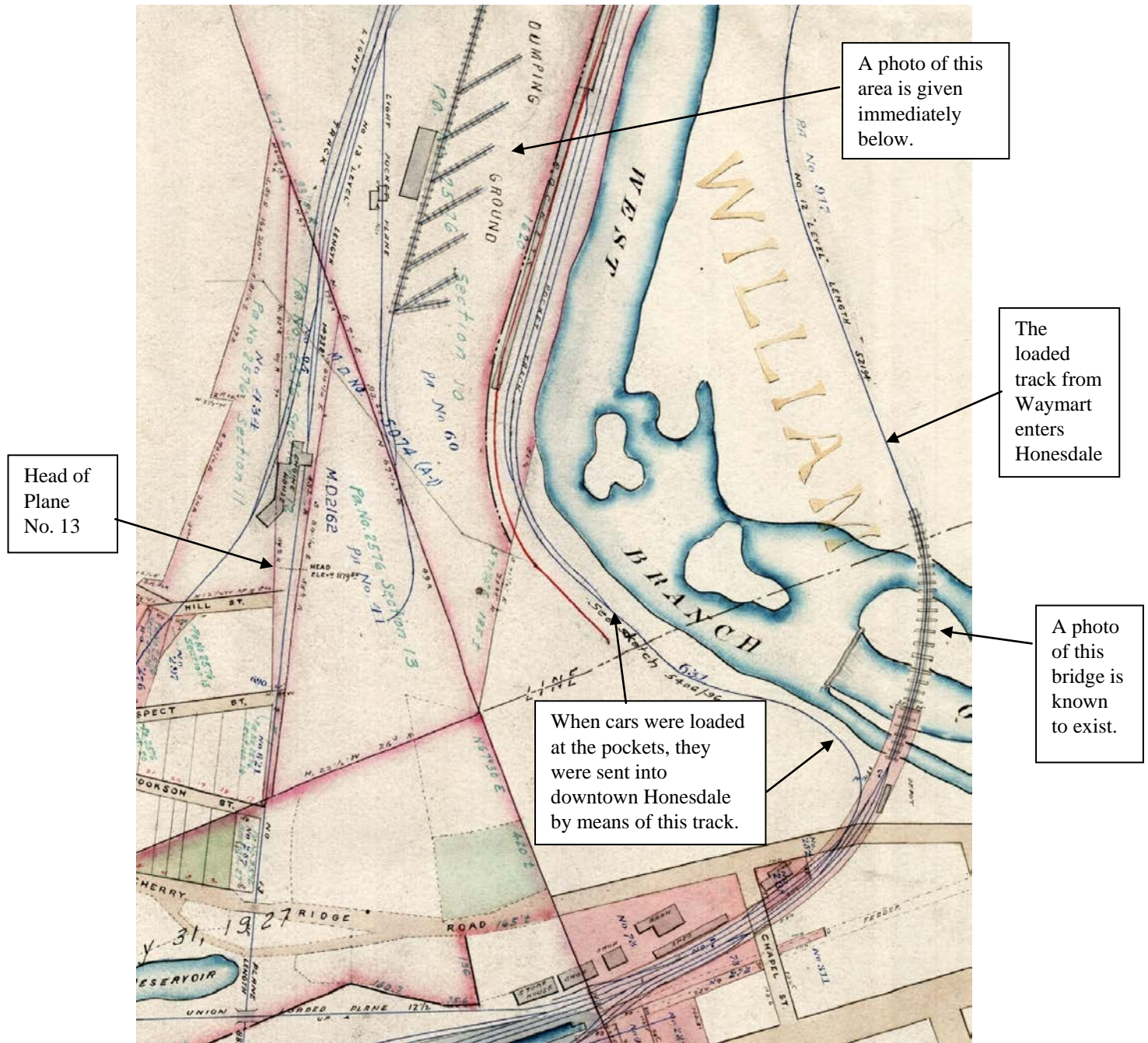


Gravity depot



Engine house at the head of Plane
No. 13

In the area at the head of Plane No. 13, there is a “Light Pocket Plane” and associated “Dumping Ground,” which are shown on the detail from the 1895 Gravity Railroad map volume given below. Access to this plane was had via No. 13 Level.

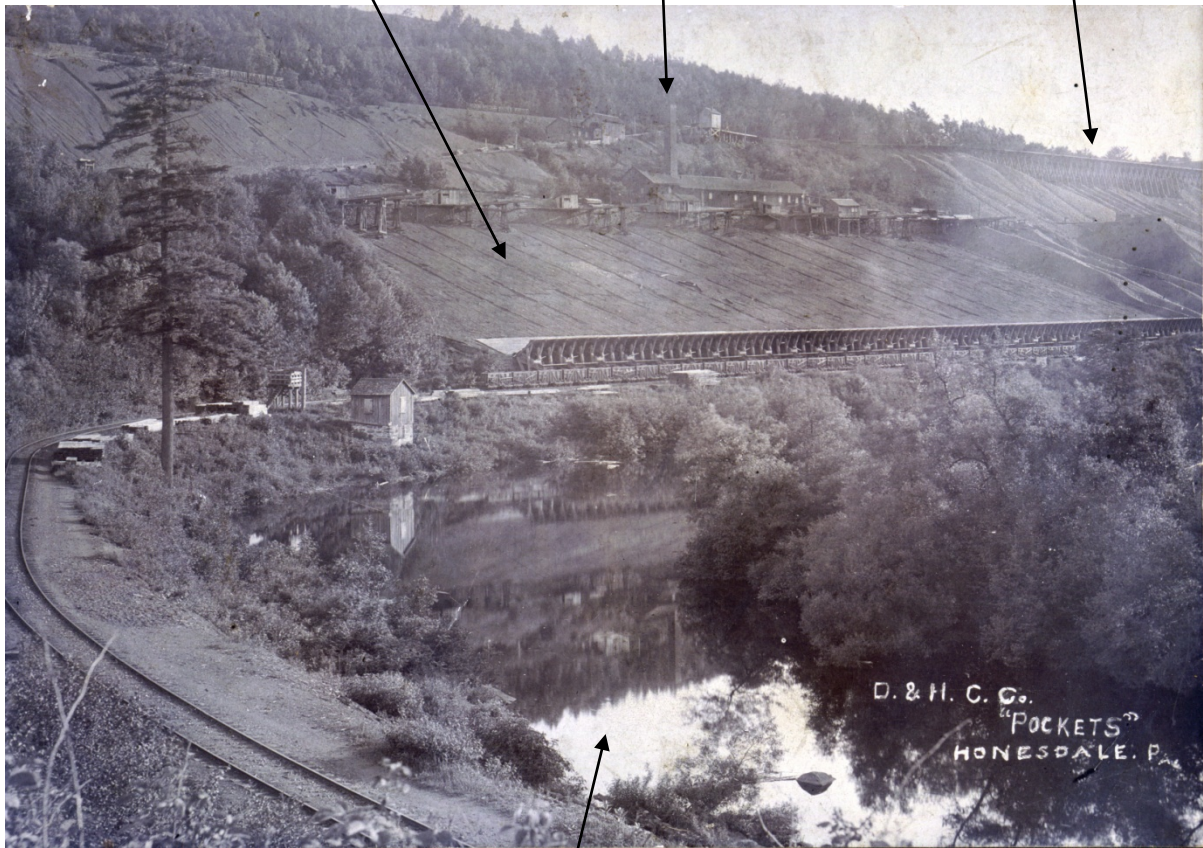


The coal pockets above the West Branch of the Lackawaxen are shown in the photo given immediately below. This is a photo by J. A. Bodie, Honesdale, PA. An electronic scan of the original of this photo, in the Clift collection (Jim and Maureen Clift), Hawley, PA, was made available to the author by Hank Loftus, White Mills, PA. Jim Clift's grandfather, William Clift, worked for the D. & H.

These are the coal chutes/pockets that are shown in the photo on page 299.

Engine house on one of the pocket planes

A photo of this area is given immediately below.



West Branch of the Lackawaxen River enters Honesdale

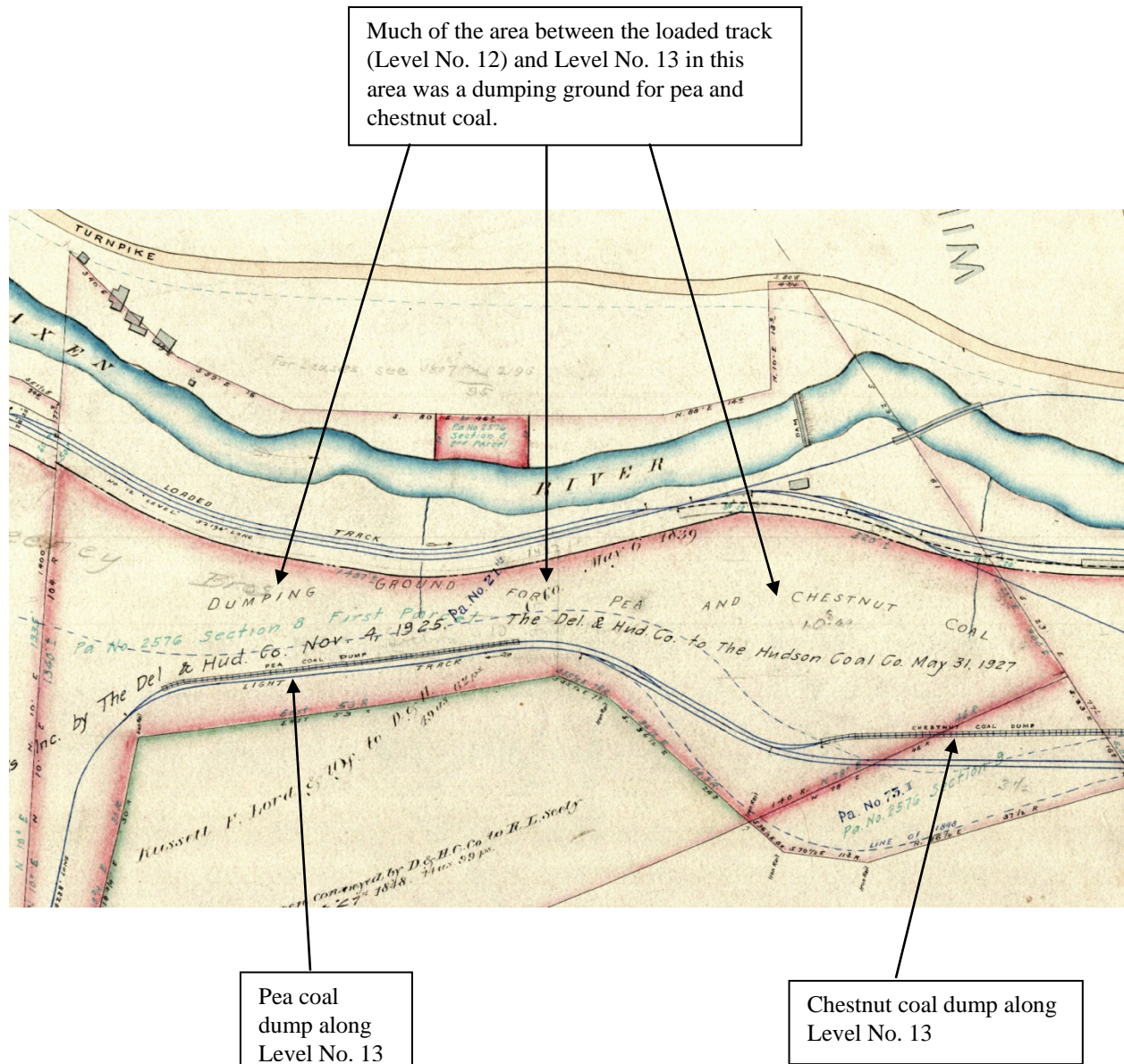
Smoke stack
at Engine
House No. 13

Empty Gravity coal cars on Level No. 13 on
their way back to Waymart and then to the
Lackawanna valley

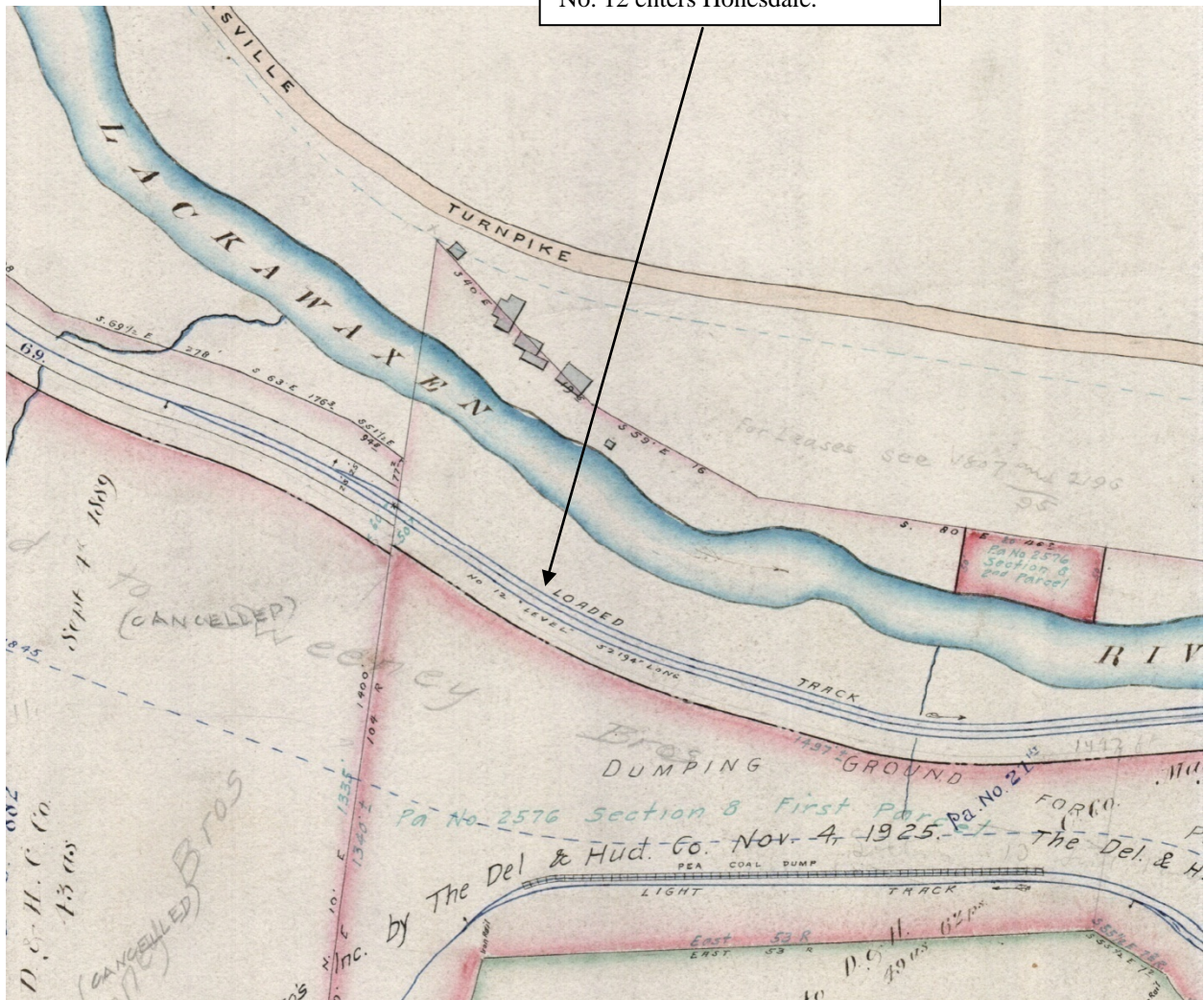
Smoke
stack at
engine
house
on
pocket
plane



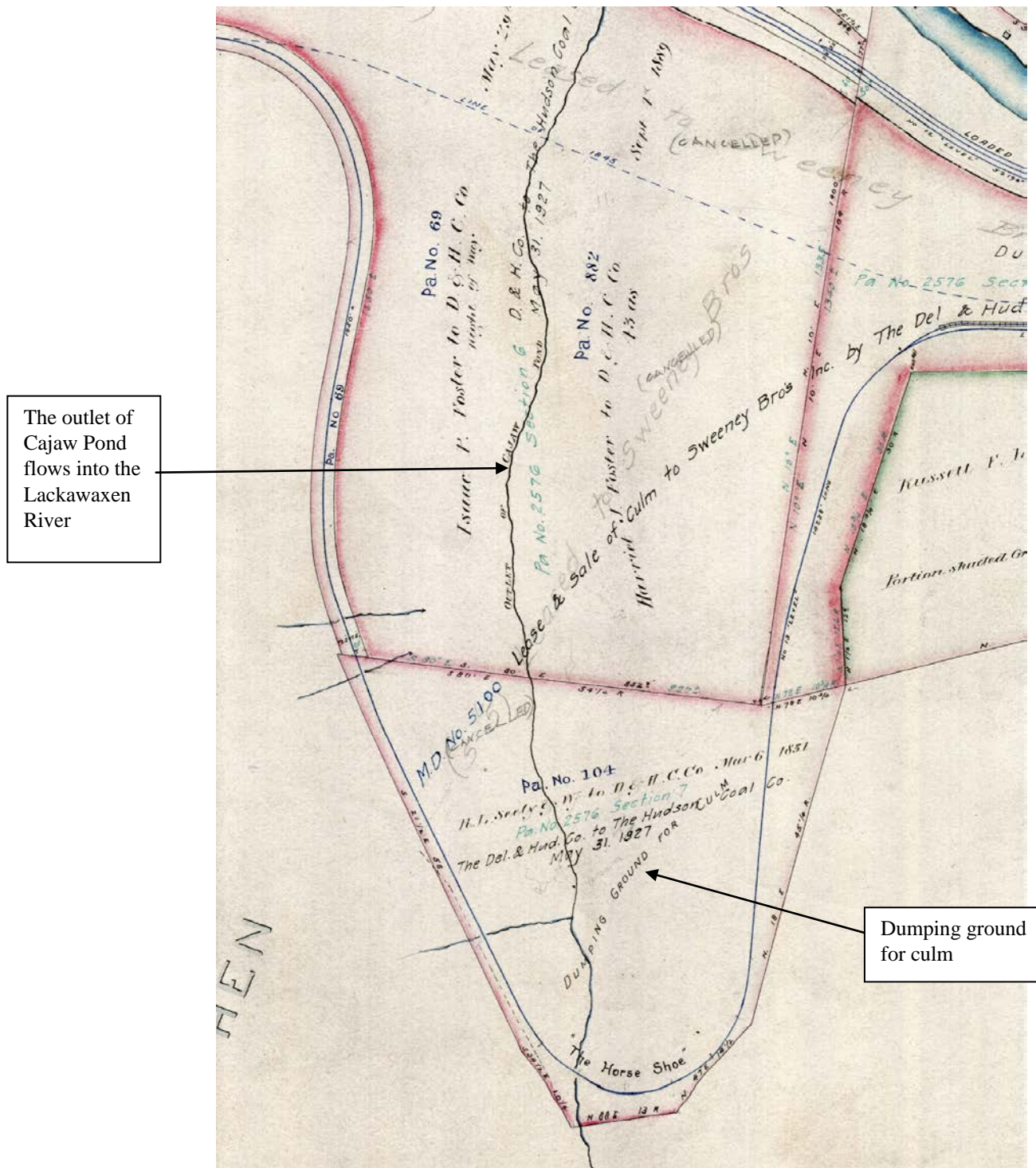
D&H dumping grounds were located in many areas in Honesdale. In the following two views from the 1895 Gravity Railroad map volume, one can see the dumping grounds that were located between the loaded and light tracks in the western section of Honesdale:



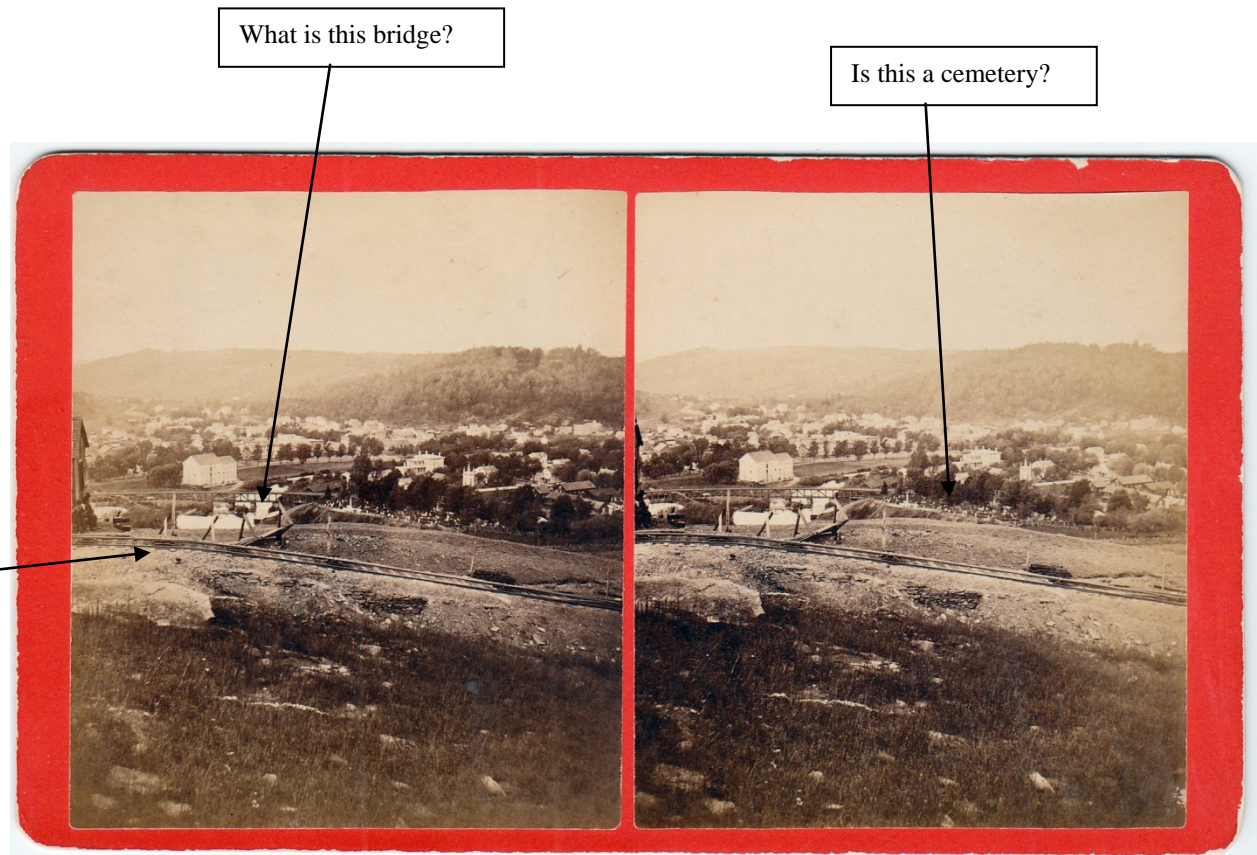
Note the triple-tracking on the loaded track in this area as Level No. 12 enters Honesdale.



The bottom of the horseshoe curve was a dumping ground for culm.



Hensel stereocard No.1100: *Honesdale, seen from the Head of No. 13 Plane*



Whitman Brown, an engineer with 30 years of service for the D&H and the Superintendent of Engines in 1865, was killed at the foot of Plane No.13 in 1865. It was he who put up the first engine used by the D&H on the Carbondale side of the Moosic Mountain. See the two newspaper articles given below:

"We regret to learn that Mr. Whitman Brown, one of the earliest residents of Carbondale, but more recently at Honesdale, was instantly killed upon the railroad near that place on Thursday last. He had been engineer upon our railroad from the early commencement of business here. His sudden death will be greatly regretted." (*Carbondale Advance*, Saturday, November 18, 1865, p. 2)

“Mr. Whitman Brown was killed on the dock in this borough on Thursday evening last, at shortly after six o’clock. He had been into Mr. R. J. Menner’s Store to buy some coffee, and with the package under his arm took his accustomed way home over the Works. At the foot of the plane he stopped and looked at a trip of cars going up. His design was to step on one of the cars of the next trip, go up the plane to where the road on which his dwelling was situated, crosses the plane, and then step off. This was a common practice with him. As he stood looking a lumber car approached from another direction, and on a switch not much used. The men in charge of it shouted to him and applied the brakes. He heard their call; stepped, but in the wrong direction; was knocked down; the wheels passed on to his body, and then stopped. He was extricated as soon as possible; but was unconscious. He was taken to his house, where he revived. He spoke of the accident as a thing ‘that was to be,’ that is, as inevitable. He survived about half an hour. / Mr. Brown was a native of Rhode Island, and fifty-seven years old. He was an engineer, and entered the service of the Delaware & Hudson Canal Company full 30 years ago, and has continued in it almost constantly since. At the time of his death he was Superintendent of engines. He put up the first engine used by Company on the Carbondale side of Moosic Mountain. For about twenty-five years he has resided here. He was a man of excellent abilities in his calling, and of the strictest integrity in all his relations. /An examination after his death revealed the fact that both his legs were broken and some of his ribs. In addition to those injuries he suffered several contusions. His life was insured for \$1,000. / He leaves a wife and three children; the youngest, a daughter of fourteen years. In this terrible affliction they have the profound sympathies of the whole community. / The funeral services were attended on Sunday afternoon, the Rev. Mr. Hoskins, of the Episcopal Church, and the Rev. Mr. Dunning of the Presbyterian Church, officiating. A very large concourse of citizens were present. The Odd Fellows appeared in a body, wearing a distinctive badge. The interment was made in Glen Dyberry Cemetery.—*Honesdale Republic*.” (*Carbondale Advance*, November 25, 1865, p. 2)

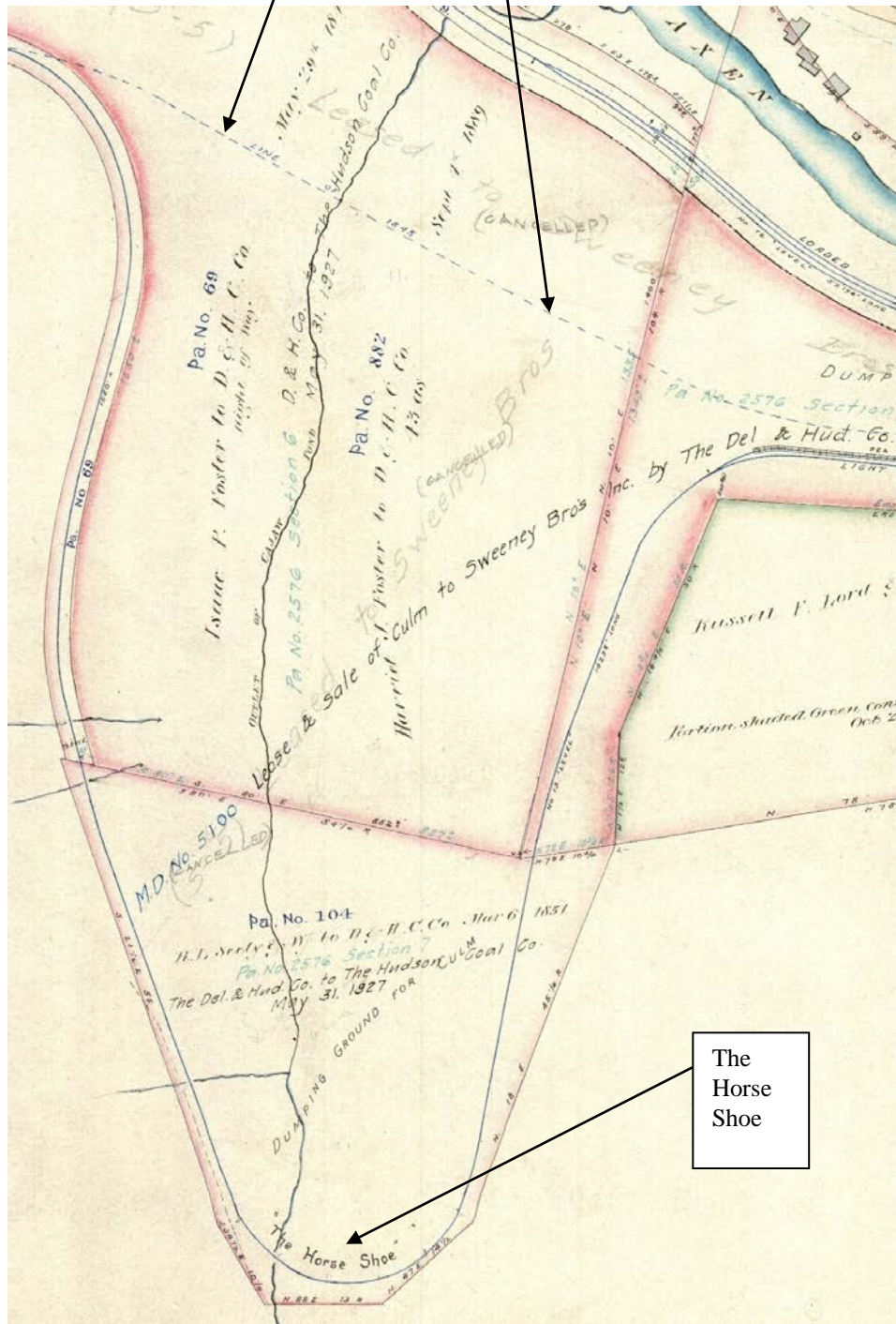
Level No. 13

1895 Gravity Railroad map:

"Horse Shoe" on No. 13 level:

When the light track between Honesdale and Waymart was installed in 1845, Level No. 13 did not go down around the Horse Shoe Curve. Rather it went straight across the top of the horse shoe.

Level No. 13 across the top of
the horse shoe in the 1845
configuration.

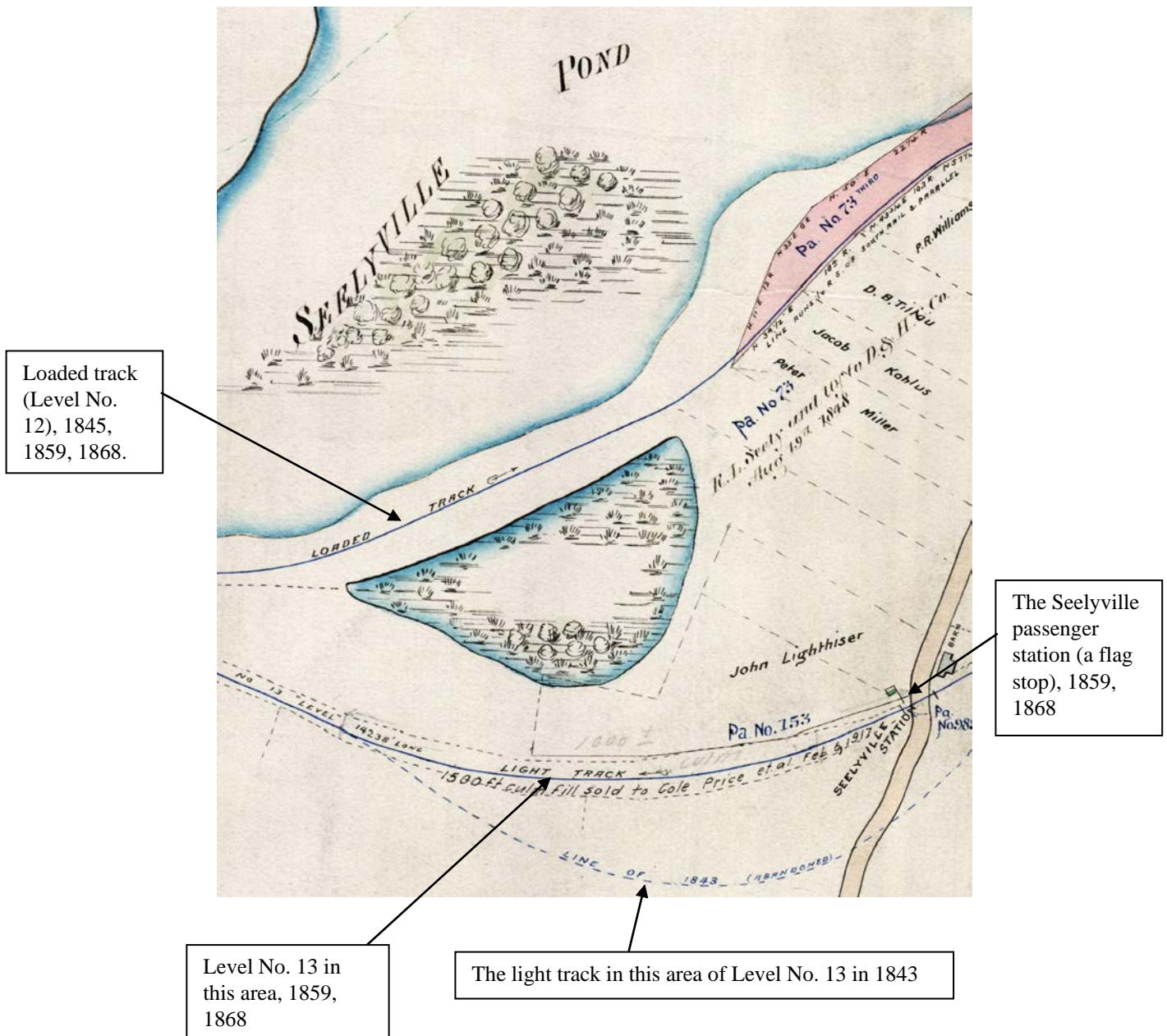


The
Horse
Shoe

1895 Gravity Railroad map:

No. 13 level and Seelyville Pond; notice the passenger station in the lower right corner. The question of passenger service on the Gravity Railroad will be addressed in detail in another unit in this series. Note the revision to the roadbed of the light track at the bottom of this detail, where the path of the 1843 roadbed is shown in this section.

At Seelyville the Lackawaxen River broadened to become Seelyville Pond. Just past Seelyville, it narrowed again and became a river.



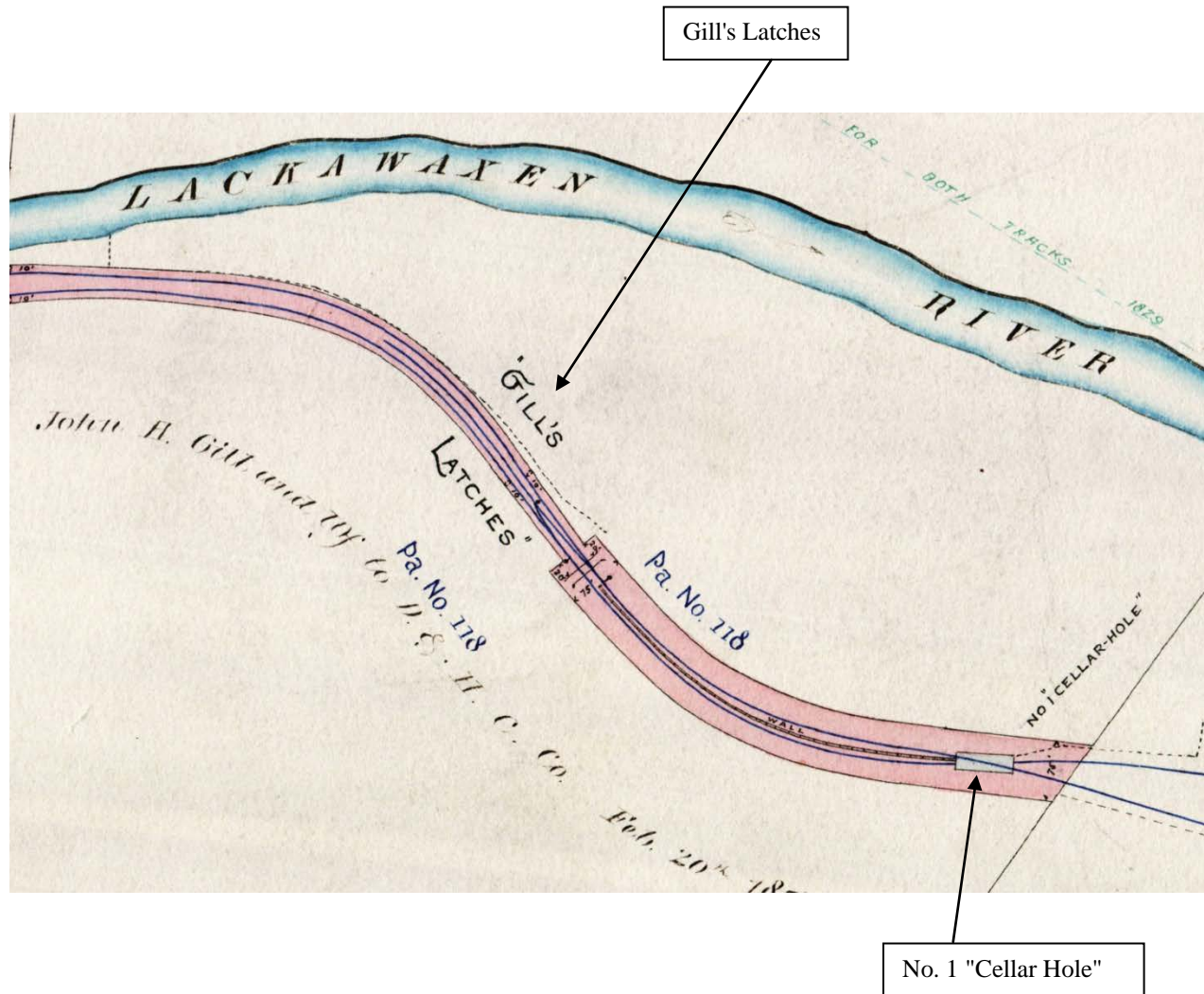
Cellar Hole No. 1 and Gill's Latches

On Level 13, just west of Seelyville Pond, the loaded and light tracks crossed at “No. 1 Cellar Hole.” At Gill’s Latches (between Seelyville and the foot of Plane No. 14), there, to the West of No. 1 Cellar Hole, the “loaded” and “light” cars could be switched, as necessary, from the loaded track to the light track or vice versa. The cars were switched in order (1) to put in or take out coal from the coal dumping/storage facilities of the D&H on No. 13 Level, or (2) to send loaded cars to Honesdale or to send empty cars to Waymart and back to the Lackawanna Valley. At a cellar hole the loaded and light tracks ran the one above the other. At the cellar hole before Gill’s Latches the light track was on the top track. No. 1 Cellar Hole and Gill’s Latches were located very near to the end of Level 13 (foot of No. 14). It makes sense that the Light track would be on the top at the crossing, because the down-hill grade on Level 13 to the Foot of No. 14 had to be maintained.

Self-acting switches, or latches:

In speaking of the planes on the 1829 configuration of the Gravity Railroad, John Torrey, in 1892, said: “The inclined planes were constructed with a *single track*, but with turnouts, and a short 100 to 150 ft. of *double track* in the middle of each plane, to permit the cars moving in one direction to pass those moving in the opposite direction. These turnouts were provided with self-acting switches, or latches, so that whenever a car passed *out* of a turnout in either direction, the switch was left in the right position to turn the next cars moving in the opposite direction into the side of the turnout thus vacated.” (quoted by Manville B. Wakefield in *Coal Boats to Tidewater*, p. 14; Wakefield tells us that he is quoting John Torrey from Gerald M. Best’s article, “The Gravity Railroad of the Delaware and Hudson Canal Company,” that was published in Bulletin #82 of the Railway and Locomotive Historical Society, April 1851)

On the map given immediately below, Gill's Latches and "No. 1 Cellar Hole" are shown on Level 13 on the light track. (No. 1, out of Honesdale, i.e., No. 13).



Accidents, Facts about the Plane, and Daily Life (1868-1899)

Misplaced switch results in the death of Henry Reynolds:

"FATAL ACCIDENT.—On the afternoon of the 3d. inst., Mr. Henry Reynolds, took a seat upon the empty cars at the head of the plane, for the purpose of riding a portion of the way home. The cars started, but some one, unknown, having carelessly or maliciously misplaced a switch, they

took the track used for dumping coal from in the winter, and which has an abrupt fall of about 40 feet at the end. The car boys noticed the cars were going wrong and endeavored to give warning to Mr. R., but he being very deaf did not hear their cries. The runners jumped down the high works on the coal and saved their lives. In an instant more the cars made the fearful leap. Mr. Reynolds was taken out from under the wreck and his injuries examined. Both legs were broken below the knees, his skull was fractured and his body covered with cuts and [word omitted in original]. A carriage was procured by the Company, the injured man placed in it and accompanied by a physician, the mournful procession started for the old gentleman's house. He died in the wagon, just beyond the Bethany toll gate. / The fifteen cars that went over were broken into fragments. The feeling of the person who was the cause of the accident can be better imagined than described.—*Honesdale Republic*." (*Carbondale Advance*, July 20, 1867, p. 3)

Stone placed on track at cellar hole at Seelyville:

"On Wednesday morning last some miscreant, with no regard for the lives or property of others, placed a heavy stone on the track of the Del. & Hud. Railroad, in the "cellar hole," at Seelyville. Nine loaded cars were thrown by it and one man was injured. Similar attempts have been repeatedly made before in the same locality. A term of year in the penitentiary would learn the rascal or rascals better manners. . ." (*Carbondale Advance*, Saturday, August 3, 1867, p. 3)

Seven cars smashed on Plane No. 13 due to a broken sling:

Accident at Honesdale: "As a train of cars on the Del. & Hud. railroad, consisting of seven cars, two of which were laden with culm, were ascending Plane No. 1, at this place [Honesdale] on Thursday of last week, the sling broke, whereupon the cars rapidly descended the plane, and ran off the end of the track, smashing them up badly. / In their descent they were hurled against the store of Mr. Abram Bernstein, but further than breaking a portion of the siding, and producing a concussion which capsized the iron safe, and disarranged some goods. Mr. Bernstein we believe sustained no loss or damage from the accident.--*Honesdale Citizen*." (*Carbondale Advance*, Saturday, August 8, 1868, p. 3)

Richard Pierce badly injured at the foot of Plane No. 13:

1869: "Mr. Richard Pierce, of Prompton, a car-runner on the Delaware & Hudson Railroad, was badly injured on Saturday, at the foot of the plane in this borough, while in the act of jumping on the cars, but losing his footing he fell under the wheels. His right arm was broken in two places and the left in one." (*Carbondale Advance*, April 17, 1869, p. 3)

Largest number of light cars ever up Plane 13 in one day:

“The largest number of light cars that ever went over the Gravity, from Honesdale to Carbondale, in one day, was on the 16th, when 2,840 passed up the plane.—*Honesdale Citizen*.” (*The Journal*, March 29, 1888, p. 3)

Passenger train accident as train No.78 ascends Plane No. 13:

"THE WIRE CABLE BROKE. / Narrow Escape From a Serious Accident on the Gravity Last Week. / As train No. 78 on the Gravity road—the passenger train that arrives in Carbondale at 5:15 p.m.—was leaving Honesdale last Friday, the wire cable on the first plane [No. 13] snapped in two when the train was part way up the incline, letting the cars back to the foot. The brakemen were at their posts and a quick application of the brakes prevented any serious damage to the cars. / E. J. McNally, a commercial traveler, living in Scranton, was hurt by the snapping of the cable. When the break occurred he was standing on the front platform with a Mr. Brown from Scranton. The cable whipped upward by its sudden separation striking Mr. McNally on the head and stunning him. Mr. Brown was more fortunate, as he jumped from the train. When the passengers realized what had happened there was panic among the passengers for a few seconds, but the danger was over so quickly that there was no trouble from this source. Mr. McNally soon recovered from his shock and was found to be injured only slightly. No one else on the train was hurt. / The cars were switched over to the Union plane [the Union light plane] and sent off by that route with only a half hour's delay. This is the first accident of the kind that has ever occurred on the Gravity road, and was a fortunate escape from serious damage." (clipping in Gritman scrapbook, dated Friday, March 15, 1889)

Passenger train in accident on Plane No.13:

“GRAVITY CARS BREAK LOOSE. / **A Link Lets the Passenger Train Down the Steepest Plane.** [emphasis added] / Yesterday afternoon as the gravity passenger train was leaving Honesdale at 1:20 and had passed the first ‘latch’ on the plane—about 100 feet from the foot, a link in the rope-chain broke, letting the cars back like a shot. The latch threw a truck of the baggage car off and wrecked the car so that it had to be abandoned. When the chain snapped the brakes were applied as soon as possible, but not in time to do any good. / Fortunately, the connections between the cars held, and the baggage car served as a drag on the passenger cars, which remained on the rails. At the foot of the plane, one truck of the derailed car ran into the shieve-pit, and the train was brought into a halt. Nobody was hurt, and the passenger cars were promptly forwarded by way of the Union plane. / Some of the passengers were thoroughly shaken up and all were badly frightened, but after assurance by the conductor they continued on their journey. The accident was one that could not have been prevented.” (*Evening Leader*, April 9, 1891, p. 4)

6838

Plane No. 14

--629 feet long (rise 102.55 feet)

--stationary steam engine at the head of the plane at the time of the 1868 configuration

--Level 14 was 7,879 feet long (fall 66.45 feet)

Water wheel note:

The water wheels used by the D&H in Carbondale were abandoned in 1859 (says W. E. Anderson); the water wheel on Plane 21 in Archbald was abandoned in 1865 (says P. A. Philbin). The last of the four water wheels in use on the light track from Honesdale to Waymart was taken out in 1868. This we know from an article in the Honesdale *Herald* that was reprinted in the Saturday, February 8, 1868 issue, p. 3, of the *Carbondale Advance*. Here is that article:

“The Del. & Hud. Canal Co. have just put a stationary steam engine in at Plane No. 14, on their railroad, in place of the old water power. The engine was built at the Dickson Works, Scranton, and has been placed in charge of Silas Hoyle as Head Engineer and Walter Bryant, Assistant. The company now work the cars on all their planes by steam power.—*Herald*.” (*Carbondale Advance*, Saturday, February 8, 1868, p. 3.)

In his remarks on the water wheels on the D&H, Dr. Steers says the following: “Water wheels on the Delaware and Hudson Canal Co. railroad with one exception were known as Rose wheels. They were 20’ in diameter by 20’ wide and undershot in function. The wheel at No. 17 [originally called No. 5] differed only in that it was 30’ in diameter. All the water wheels were replaced by steam power in 1863.” (“The Delaware & Hudson Canal Company’s Gravity Railroad,” *Proceedings of the Canal History and Technology Symposium*, Volume II, March 26, 1983, pp. 129-203).

Dr. Steers, it should be noted, is incorrect when he says that all D&H water wheels were replaced with steam engines in 1863. The last wheel, the one on Plane 14, was replaced with a steam engine in 1868.

Hensel Nos. 1104-1105: *Looking down from the Head of No. 14 Plane*

We have not been able to locate copies of these two stereoviews. Who owns copies of these two stereoviews?

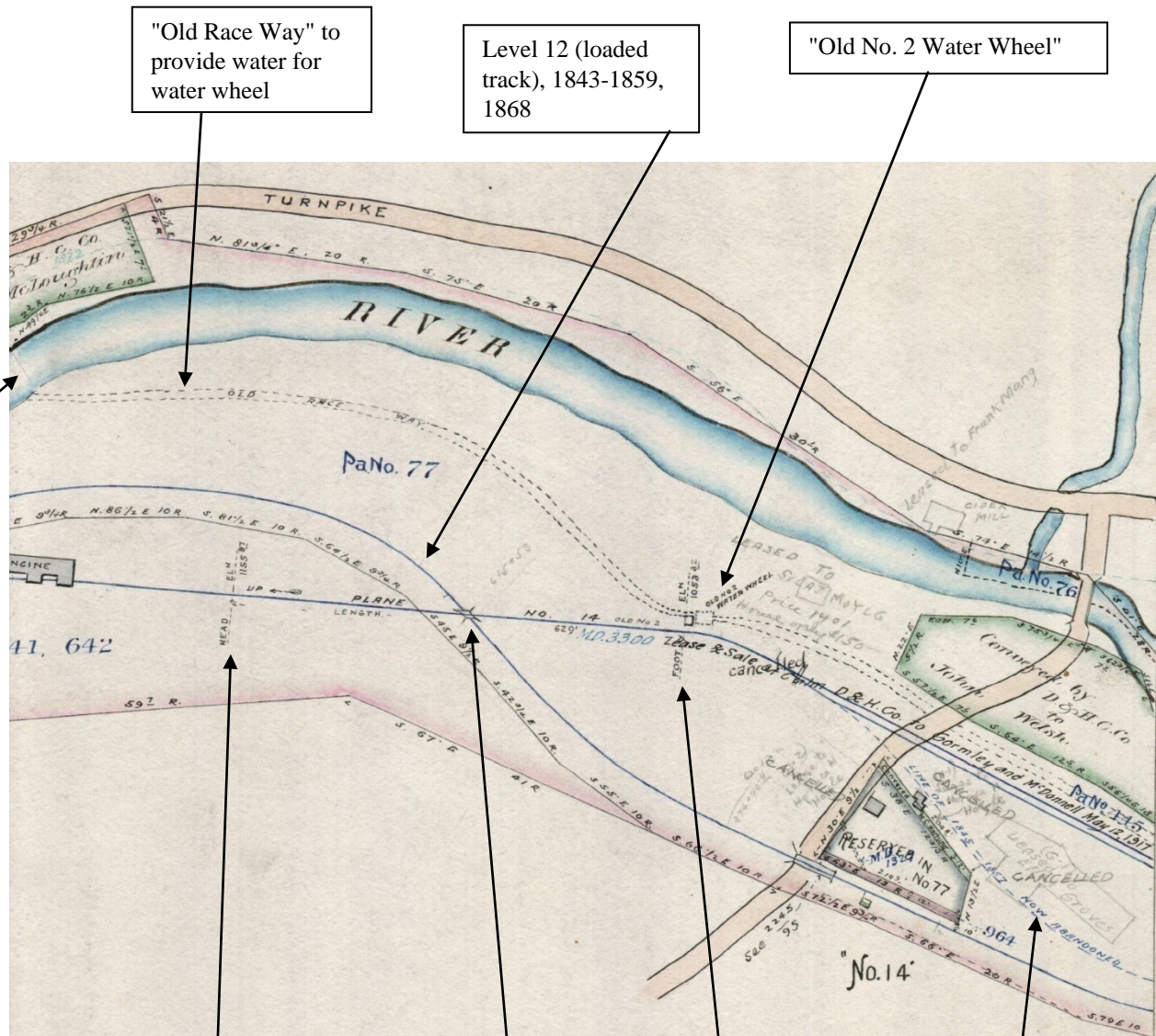
Here are two Plane No. 14 photos that were taken by Dick Temple (d.temple@hotmail.com; 315-569-8028) in 2010 of two sites on property that he now owns. These two photos were made available to the Carbondale Historical Society on August 19, 2011.

The photo on the left was taken from half-way up Plane No. 14 at the crossing of the light track (on the left) and the loaded track (on the right). The photo on the right of the stonework remaining of the engine house at Plane No. 14 was taken looking down the plane.

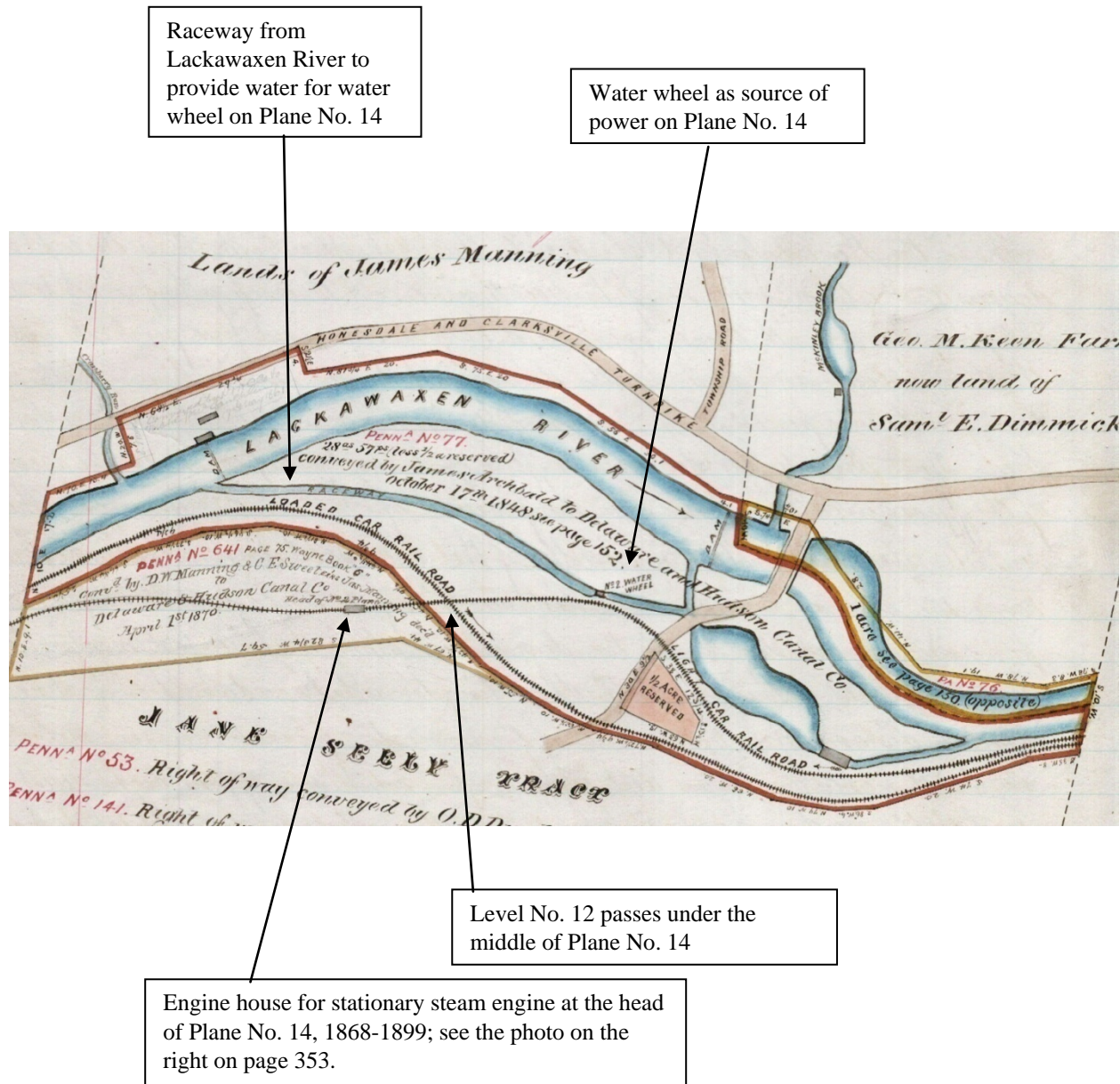


1895 Gravity Railroad map

Plane No. 14 and engine house. Note that in this view that the exact location of "Old No. 2 Water Wheel" is shown. Also shown is the "Old Race Way" (the race which supplied the water to power the wheel). It is called here "Old No. 2," i. e., the second plane out of Honesdale, i. e., Plane No. 14.



A second view of the Plane 14 area is given on the map on page 151 in the D&H Deeds PA, pp. 150-151, that illustrates the deed, dated October 17, 1848, between James Archbald and wife and The Delaware and Hudson Canal Company. Here is that map:



In the middle of Plane 14, the loaded track went under the light track (Plane 14), but there was no possibility of switching cars from light to loaded or vice versa there, as there was at Farnum's Latches or Gill's Latches.

6839

Cellar Hole No. 2 and Farnum's Latches

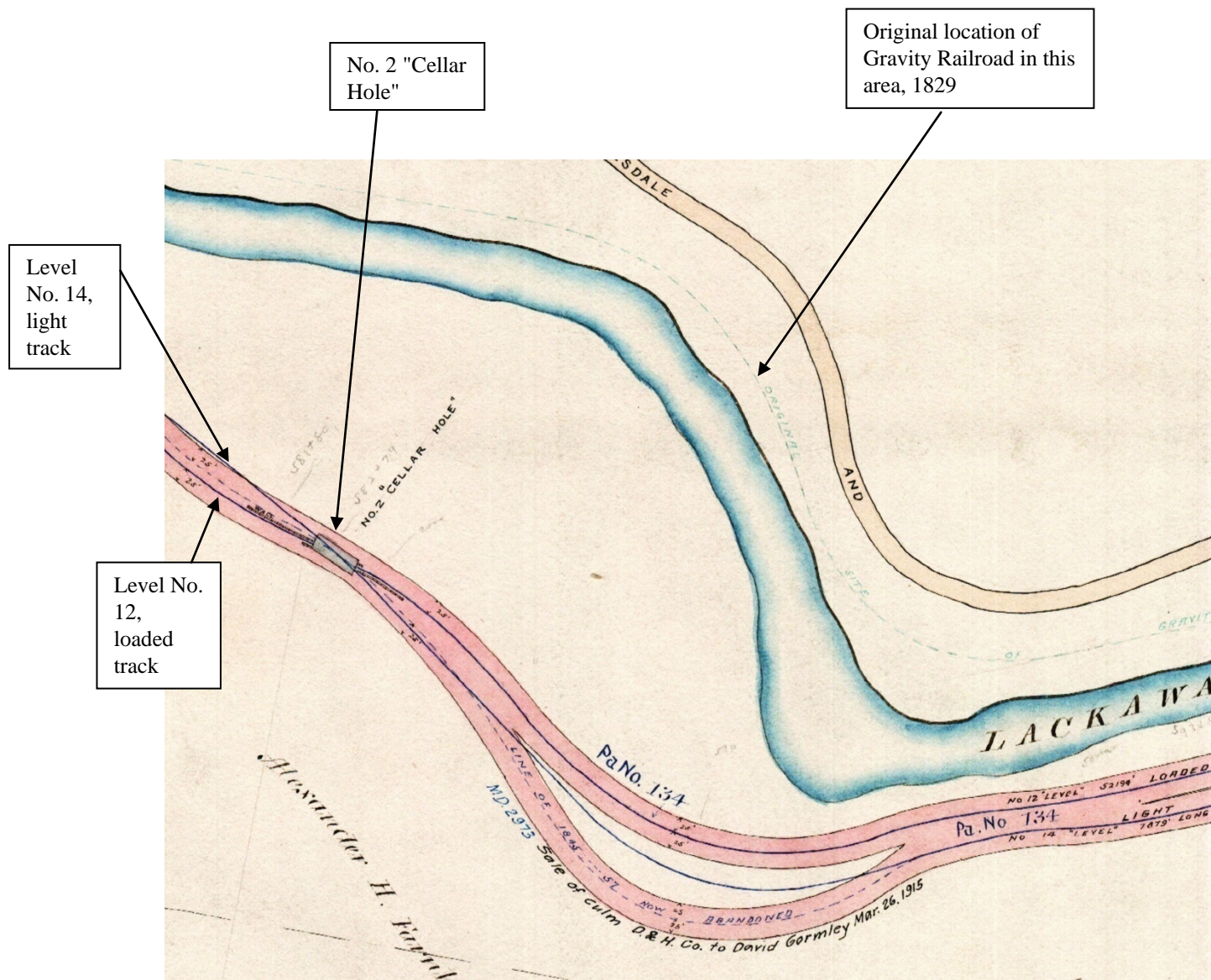
Cellar Hole No. 2 (on the 2nd plane out of Honesdale, i.e., No.14) and Farnum's Latches on Level 14:

On Level 14, just east of/not far from Prompton, at Cellar Hole No. 2, the loaded and light tracks crossed, the light track above the loaded. At Farnum's Latches there, to the West of Cellar Hole No. 2, the "loaded" and "light" tracks could be switched, as necessary, from the loaded track to the light track or vice versa. The cars were switched in order (1) to put in or take out coal from the coal dumping/storage facilities of the D&H on No. 13 Level, or (2) to send loaded cars to Honesdale or to send empty cars to Waymart and back to the Lackawanna Valley. At a cellar hole, the loaded and light tracks ran the one above the other. At the cellar hole at Farnum's Latches, the light track was on the top track and the loaded track on the bottom (just as at Gill's Latches and Cellar Hole No. 1). Cellar Hole No. 2 and Farnum's Latches were located on Level 14, not far from Prompton and the Foot of No. 15. It makes sense that the Light track would be on the top at the crossing, because the down-hill grade on Level 14 to the Foot of No. 15 had to be maintained.

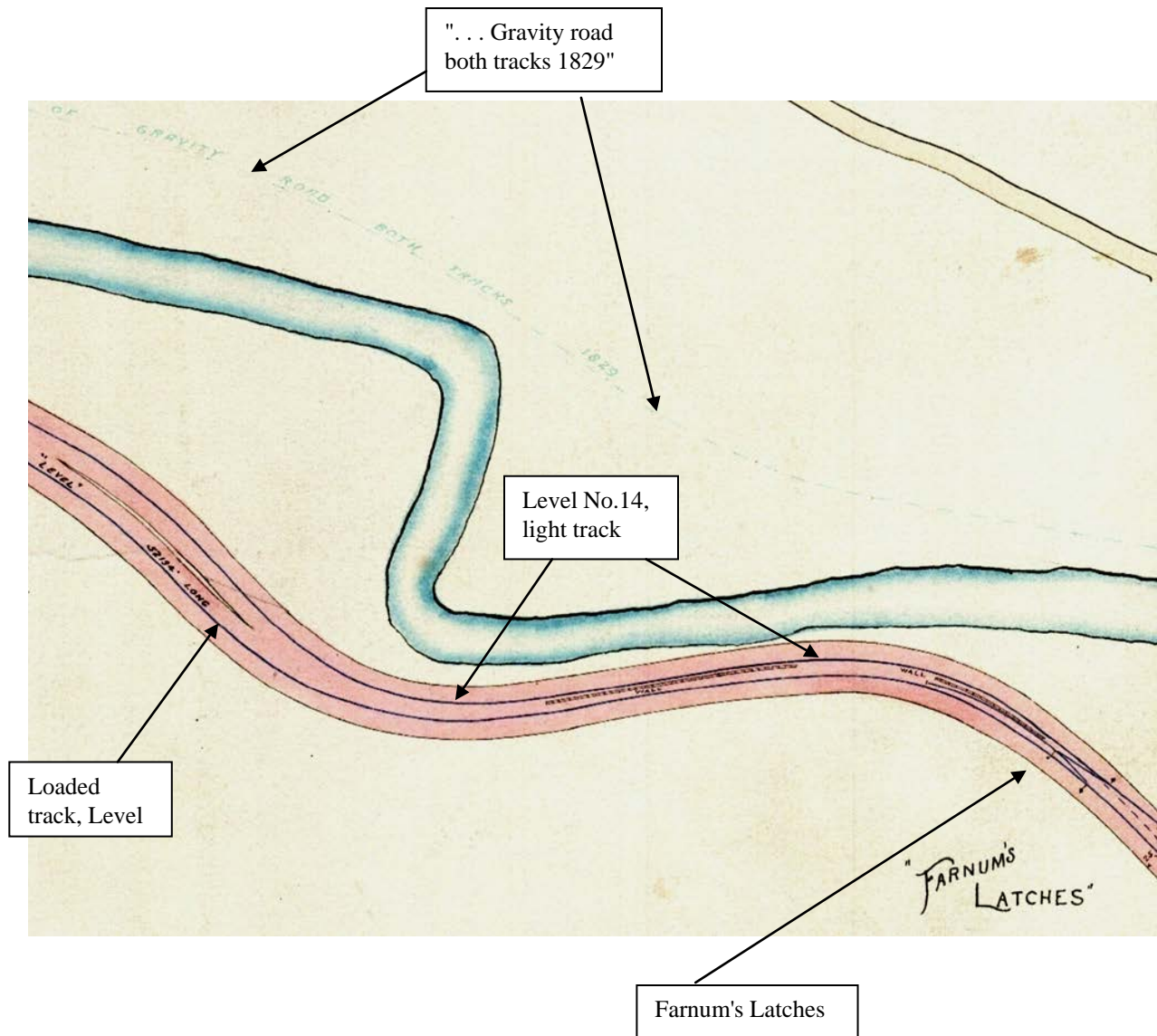
1895 Gravity Railroad map: two views

On the light track on No. 14 Level, showing, in the first view No. 2 Cellar Hole and the second view Farnum's Latches.

No. 2 Cellar Hole:



Farnum's Latches



Self-acting switches, or latches:

In speaking of the planes on the 1829 configuration of the Gravity Railroad, John Torrey, in 1892, said: "The inclined planes were constructed with a *single track*, but with turnouts, and a short 100 to 150 ft. of *double track* in the middle of each plane, to permit the cars moving in one

direction to pass those moving in the opposite direction. These turnouts were provided with self-acting switches, or latches, so that whenever a car passed *out* of a turnout in either direction, the switch was left in the right position to turn the next cars moving in the opposite direction into the side of the turnout thus vacated.” (quoted by Manville B. Wakefield in *Coal Boats to Tidewater*, p. 14; Wakefield tells us that he is quoting John Torrey from Gerald M. Best’s article, “The Gravity Railroad of the Delaware and Hudson Canal Company,” that was published in Bulletin #82 of the Railway and Locomotive Historical Society, April 1851)

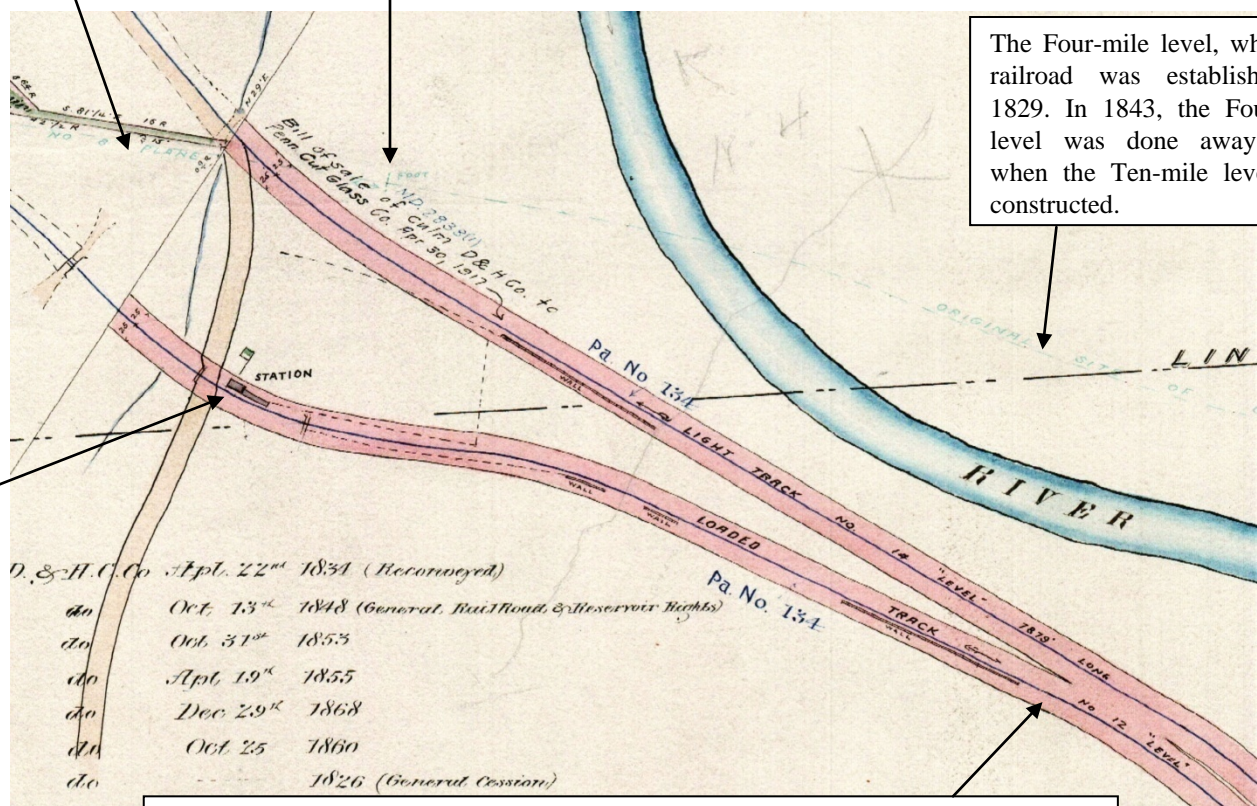
In this view from the 1895 Gravity Railroad map volume, we see a portion of Level 14, descending towards Prompton. On the loaded track, on the far left, the Passenger Station on the loaded track at Prompton:

Foot of Plane No. 8, 1829. This is where the Four-mile level began. The Four-mile level crossed the Lackawaxen at this point and ran between the Lackawaxen and the Honesdale and Clarkson Turnpike all the way into Honesdale, passing through the middle of Seelyville Pond on the way. When the Ten-mile level was installed in 1843, the portion of it that ran from Prompton to Honesdale began at the head of what was, in the period 1829-1843, the head of Plane No. 8, and ran from there to Honesdale on the route the loaded track, 1843-1899. On the map given here, the "Loaded Track" is, for the most part, the path of Ten-mile level through this section, 1843-1899. From Waymart to Prompton, the "Loaded Track" is, for the most part, the path of the Six-mile level between those two points.

Plane No. 8, 1829;
faint blue pencil

The Four-mile level, when the railroad was established in 1829. In 1843, the Four-mile level was done away with, when the Ten-mile level was constructed.

Passenger station at Prompton on the loaded track



Loaded track in this section, 1843-1899. The loaded track from Waymart to Honesdale was identified as Level No. 12 in the period 1868-1899.

Accidents, Facts about the Plane, and Daily Life

Fatal accident near "Gill's brook, "a short distance above Seelyville:

1868: **"FATAL ACCIDENT.** – On Saturday night last Mr. John Coffin, an old resident of this vicinity, having spent the day in town [Honesdale] started for his home at No. 2 [i.e., No. 14] via the Del. & Hud. R. R. Not reaching home that night, his family became alarmed as to his safety, and search being made, his lifeless body was found, lying in the road at a point where it passes under the railroad track near Gill's brook, a short distance above Seelyville. Mr. Coffin had evidently missed his footing at the point and falling several feet upon the stones beneath, had broken his neck. His body was still warm when found. The deceased leaves a family.—*Wayne Co. Herald.*" (*Carbondale Advance*, October 10, 1868, p. 3)

Horatio Whiting killed instantly at the foot of No. 14 plane:

July 29, 1874: "Horatio Whiting, riding into foot No. 14 plane, was knocked off by cars, and was dragged until engine could be stopped; he was instantly killed." (1874 *PA State Auditor General Report*, p. 130)

Intoxicated man in accident on Plane No. 14:

December 8, 1874: "Paul Cooper, getting on trip of cars starting up No. 14 plane; had leg run over and badly crushed; he was intoxicated." (1874 *PA State Auditor General Report*, p. 130)

Joseph Flederbach was born at Fortena in 1869:

In the biographical portrait of Joseph Flederbach (on pp. 199-200 of the July 1, 1927 issue of *The Delaware and Hudson Company Bulletin*) we read: "He was born at Fortena, near Honesdale, June 18, 1869, second oldest of seven children of the late Francis Flederbach, a veteran of the Civil War who, as a member of Battery C, 2nd Regiment, Pennsylvania Volunteers, Heavy Artillery, was wounded during the siege of Petersburg, Va., June 15-30, 1864. After being mustered out of the service on September 25, 1865, the father returned home and later entered the employ of our Company as a laborer at the coal pockets in Honesdale. . . As a slate picker he [Joseph Flederbach] was first engaged on the Union dock which was located about on the site of the present turntable at Honesdale. There were six or eight other boys of his own age in the 'gang' that picked the 'flat stuff,' slate and stone, that still remained in the coal after it had passed through the screens on its way into the canal boats. Their day began at 6 a. m. and continued until after 6 p. m., with an hour out for lunch, and their boss was Jimmy DeLancy. Later, he was similarly employed at the 'Dog's Nest,' as another screen located about where our station now stands, was known."

6840

Plane No. 15

--at Prompton

--1,312 feet long (rise 174.65 feet)

--see the Water Wheel note on pages 352-53

--Level 15 was 6,673 feet long (fall 55.87 feet)

1895 Gravity Railroad map

Prompton: 3 views

The first view of Prompton: In this view, we see the Loaded Track coming down into Pompton, passing directly in front of George Schroeder's house (the house in the lot marked "628") and then crossing the Honesdale Turnpike to the foot of No. 15, where the passenger and freight stations on the light track at Prompton are located.

Raceway from the
Lackawaxen to provide water
to the wheel at Plane No. 15

Water wheel at Plane
No. 15

Plane No. 15,
1843-1857

Plane No. 15,
1857-1899

Passenger station on light
track at Plane No. 15

Freight station on light
track at Plane No. 15

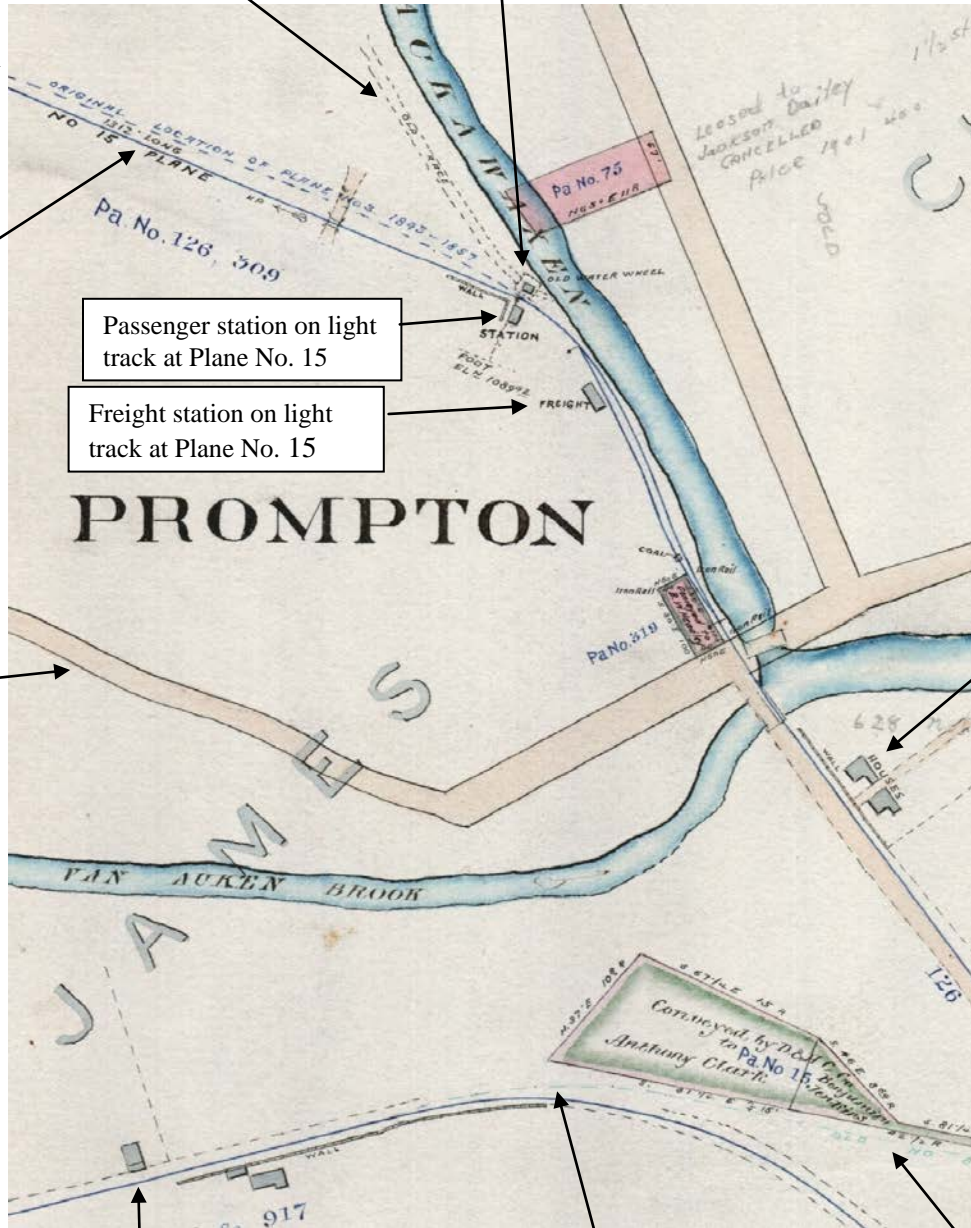
Present-day
Route 6
(formerly the
Honesdale
Turnpike)

The George
Schroeder
house

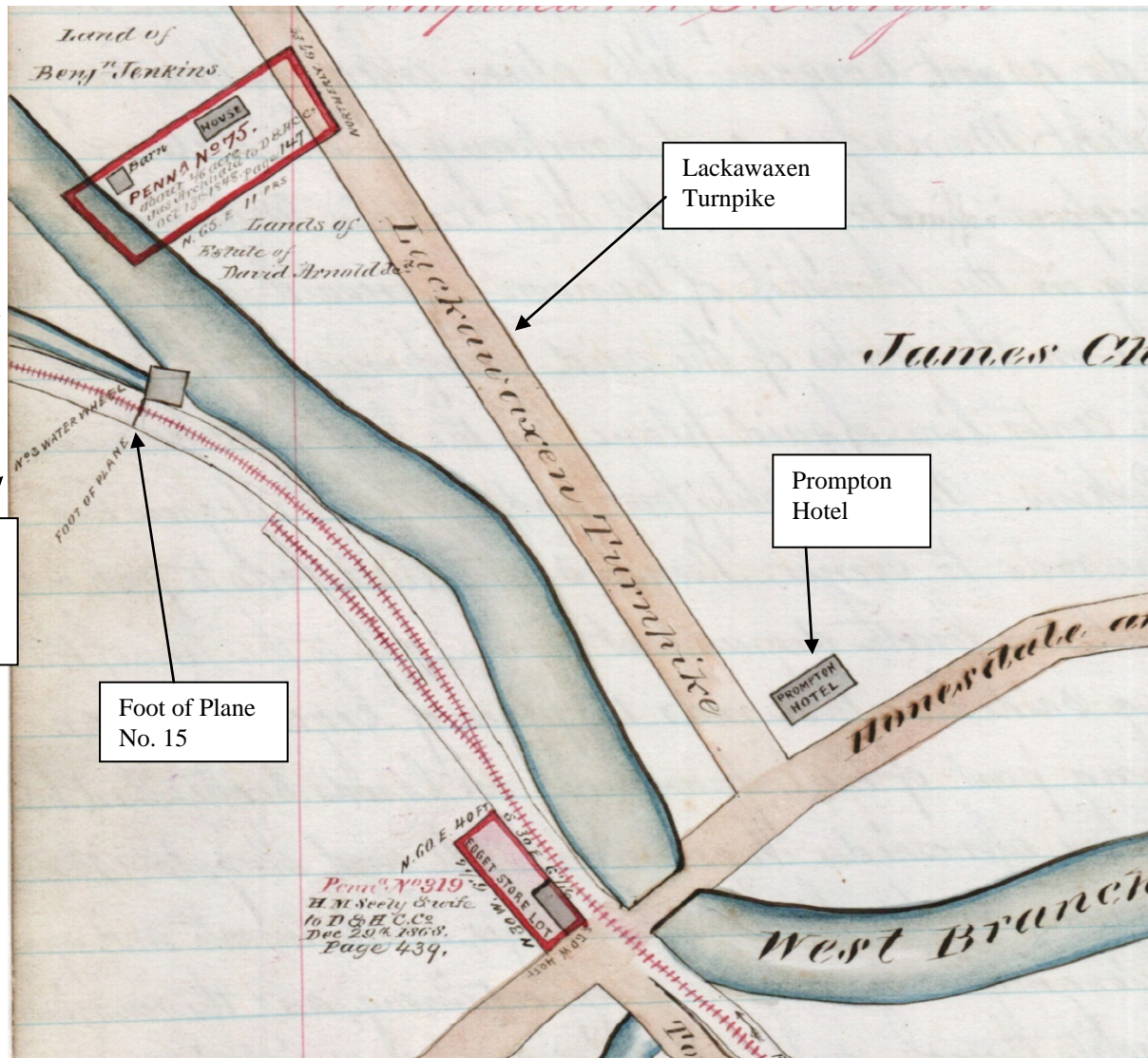
Level No.12, 1843-1899

Approximate location of head of
Plane No. 8, 1829-1843

Plane No. 8,
1829-1843;
dotted line, faint
blue pencil

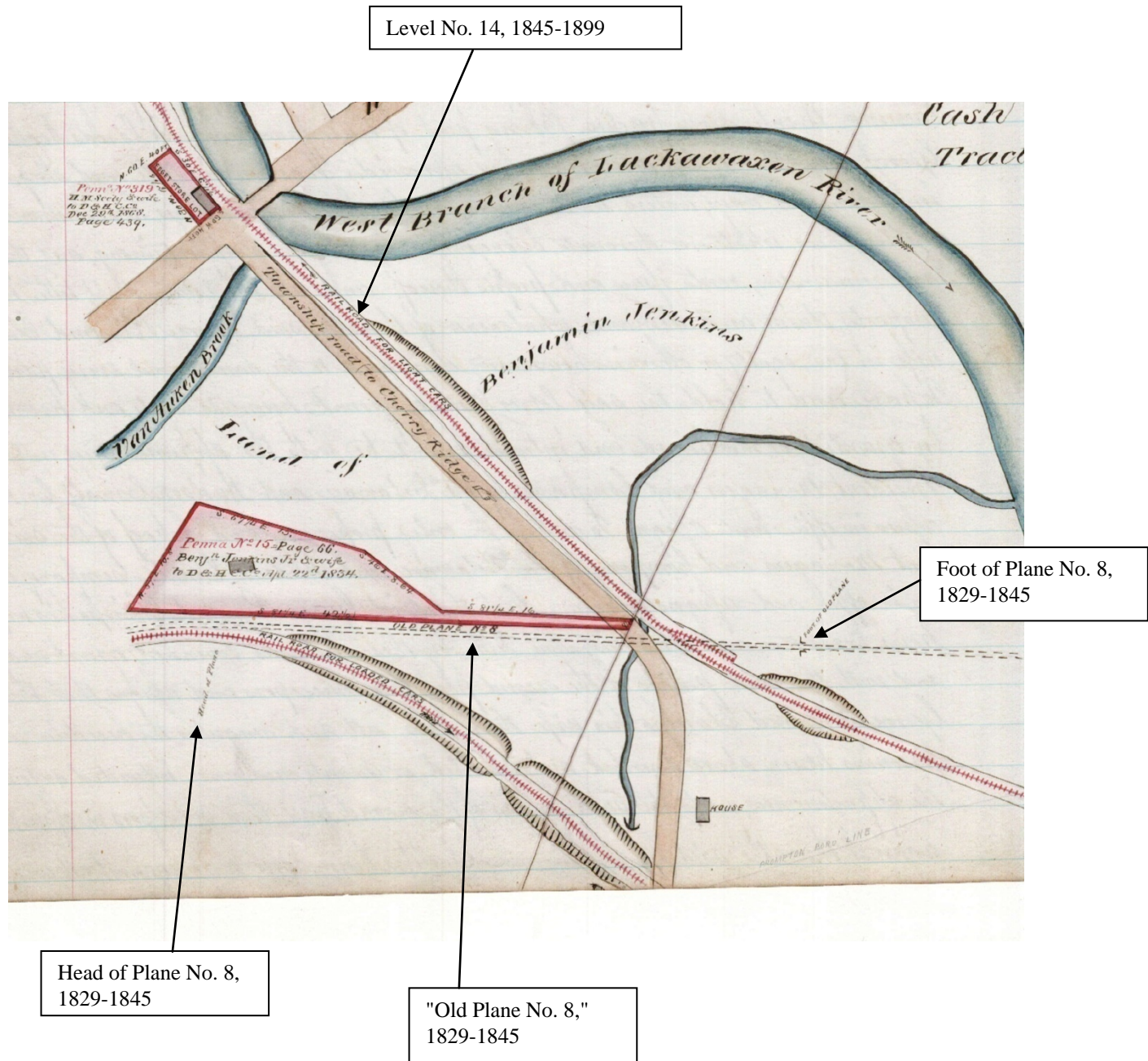


A second map view of the area shown in view one above is given in the D&H Deeds PA on the map on page 86 that illustrates the deed, pp. 85-86 between George Rix and wife and The Delaware and Hudson Canal Company, dated December 27, 1842. Like the view given above, the map given immediately below contains a wealth of details about the site, including the exact location of the Prompton Hotel.

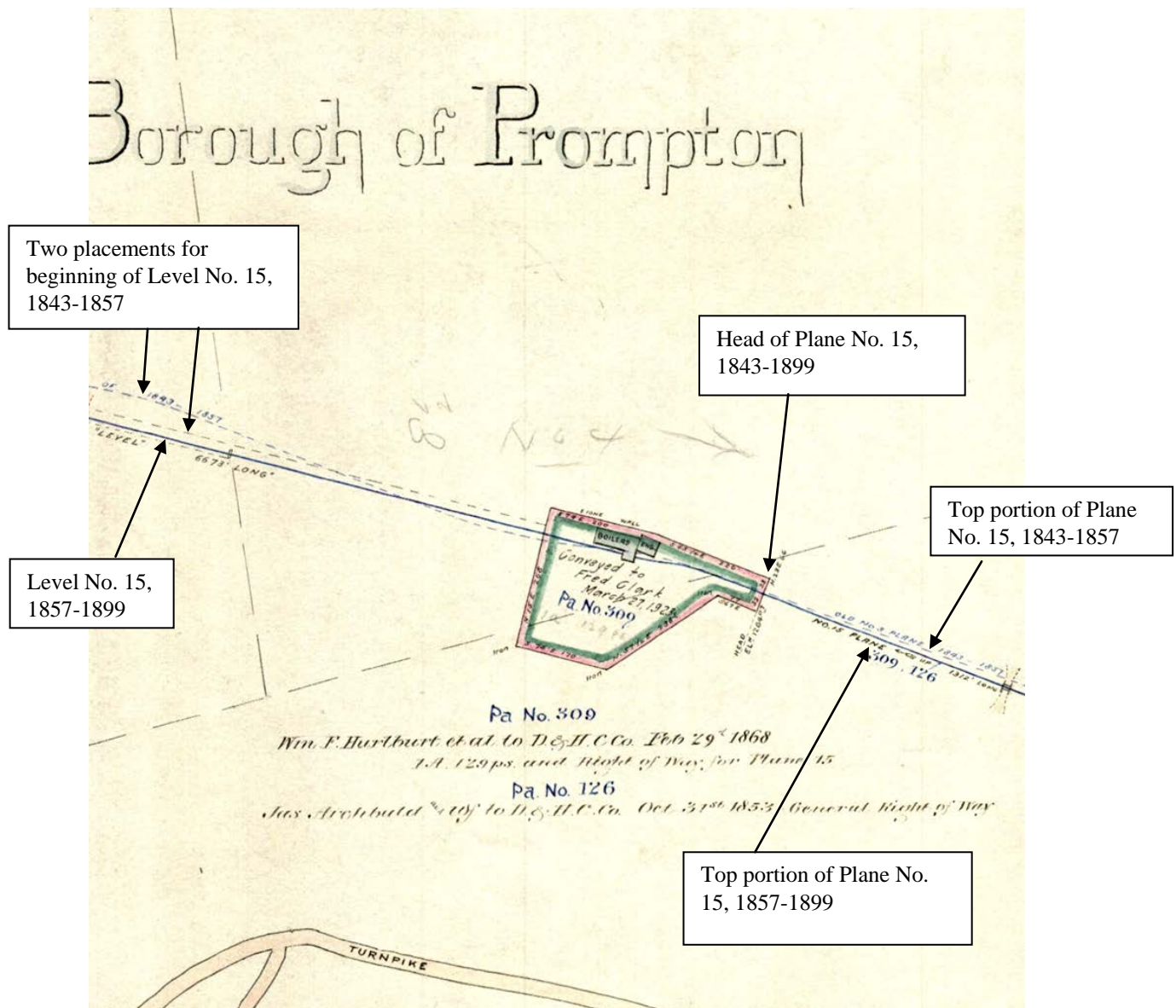


View two: A second map view of the area is given in the D&H Deeds PA on the map on page 86 that illustrates the deed, pp. 85-86 between George Rix and wife and The Delaware and Hudson Canal Company, dated December 27, 1842. Given below is that map. Note that the exact

locations of the Head and the Foot of “Old Plane No. 8” are shown. Nowhere else but on this map and on the view above of Prompton is shown the exact location of Old Plane No. 8. Following the installation of the light track from Honesdale to Waymart, 1843-1845, there were some “modifications” made to that portion of the line: water wheels at the foot of Planes 13, 15, 16, and 17 replaced by steam engines at the heads of those planes; slight moving/fine tuning of the location of Plane 15, perhaps others; also slight movements of the roadbeds.



The third view of Prompton: The engine house at the head of No. 15 Plane, which was 1,312 feet long. We also see the beginning of Level 15, which was 6,673 feet long, which went West on the North side of the present auto highway for at least a mile and then came down the grade, at Steene, and crossed both the highway and the Van Auken Brook (which runs from Keen's Pond to Prompton) at Steene.



Hensel stereograph card No. 1106: *Looking toward Depot, at Prompton, on Light Track* (the depot at Prompton on the light track was at the foot of No. 15); the water shown to the right of the tracks in this photo is the West Branch of the Lackawaxen River (which comes out of the Prompton Dam and runs into Honesdale).



West
branch of
Lacka-
waxen
River

End of Level No. 14, Prompton,
1843-1899

Accidents, Facts about the Plane, and Daily Life

Ash car breaks loose and breaks feed pipe on Plane No. 15:

“A car used for running out ashes at No.15 got started from the ash heap on Tuesday and ran into the fire room breaking the feed pipe delaying the light cars until 9 p.m.” (*Carbondale Leader*, March 14, 1885, p.2)

Howard Fitch was the engineer at Plane No. 15 in 1899:

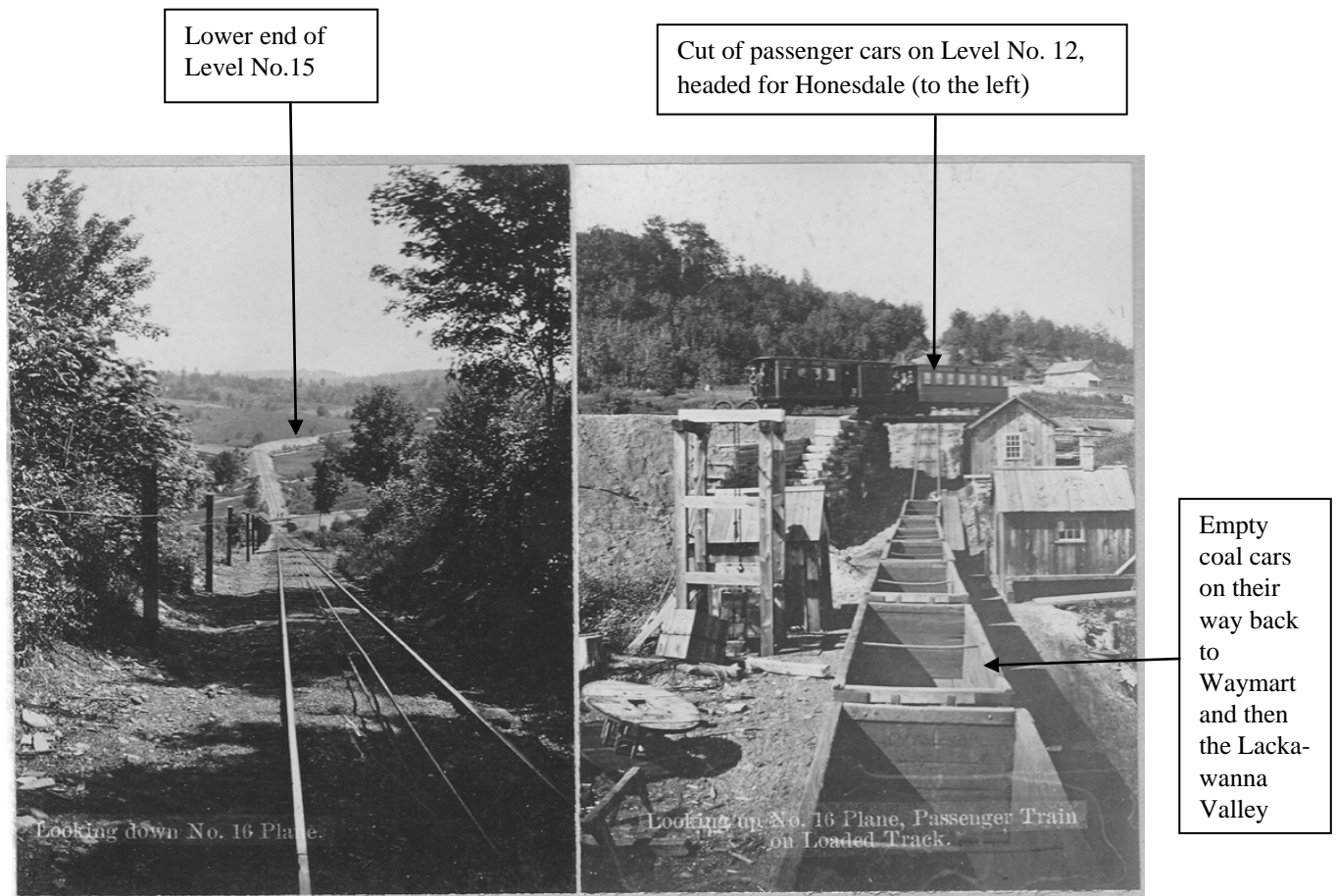
The engineer at Plane No. 15 (Prompton), on the light track, at the time the Gravity Railroad was abandoned, was Howard Fitch (see biographical portrait of Howard Fitch, "Like a Vanishing Dream," pp. 279-280, September 15, 1927 issue of *The Delaware and Hudson Company Bulletin*).

6841

Plane No. 16

- Plane 16: 1,027 feet long (rise 164.02 feet)
- Level 16: 10,572 feet long (fall 89.72 feet)
- Loaded and Light tracks crossed near the foot of No. 16.
- see Water-wheel note, pp. 352-53

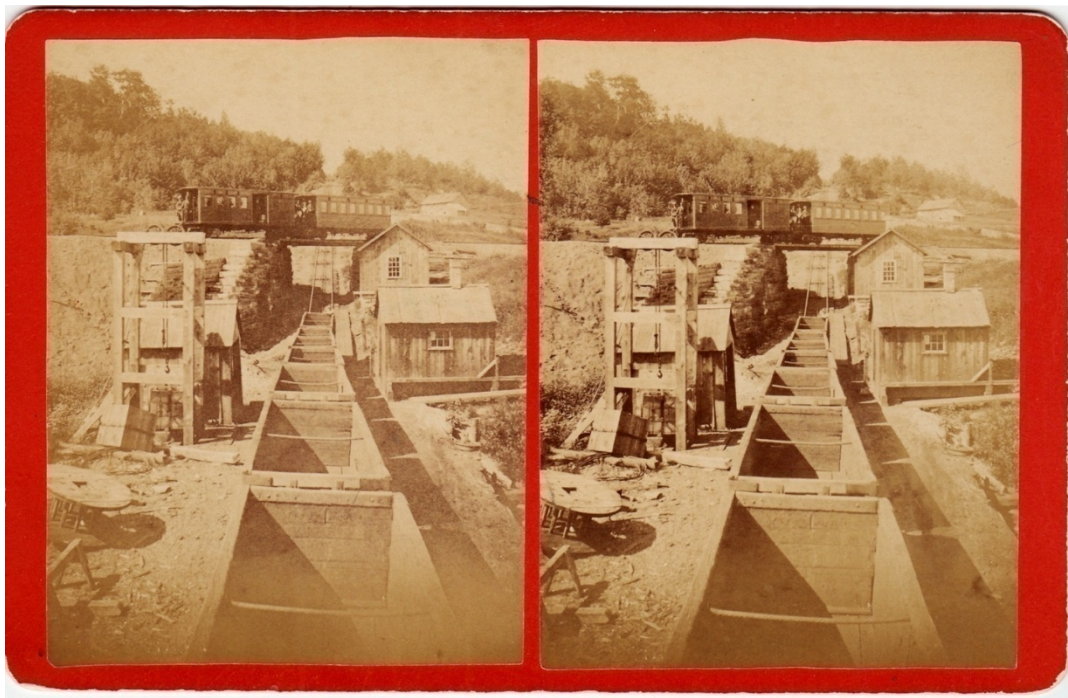
Looking down No. 16 Plane and Looking up No. 16 Plane, Passenger Train on Loaded Track from Orig. Photo Souvenir of Del. & Hud. Gravity Road. Published by L. Hensel, Hawley, PA.



When you are looking down Plane No. 16, you are looking in the direction of Honesdale. When you are looking up Plane No. 16, you're looking in the direction of Waymart.

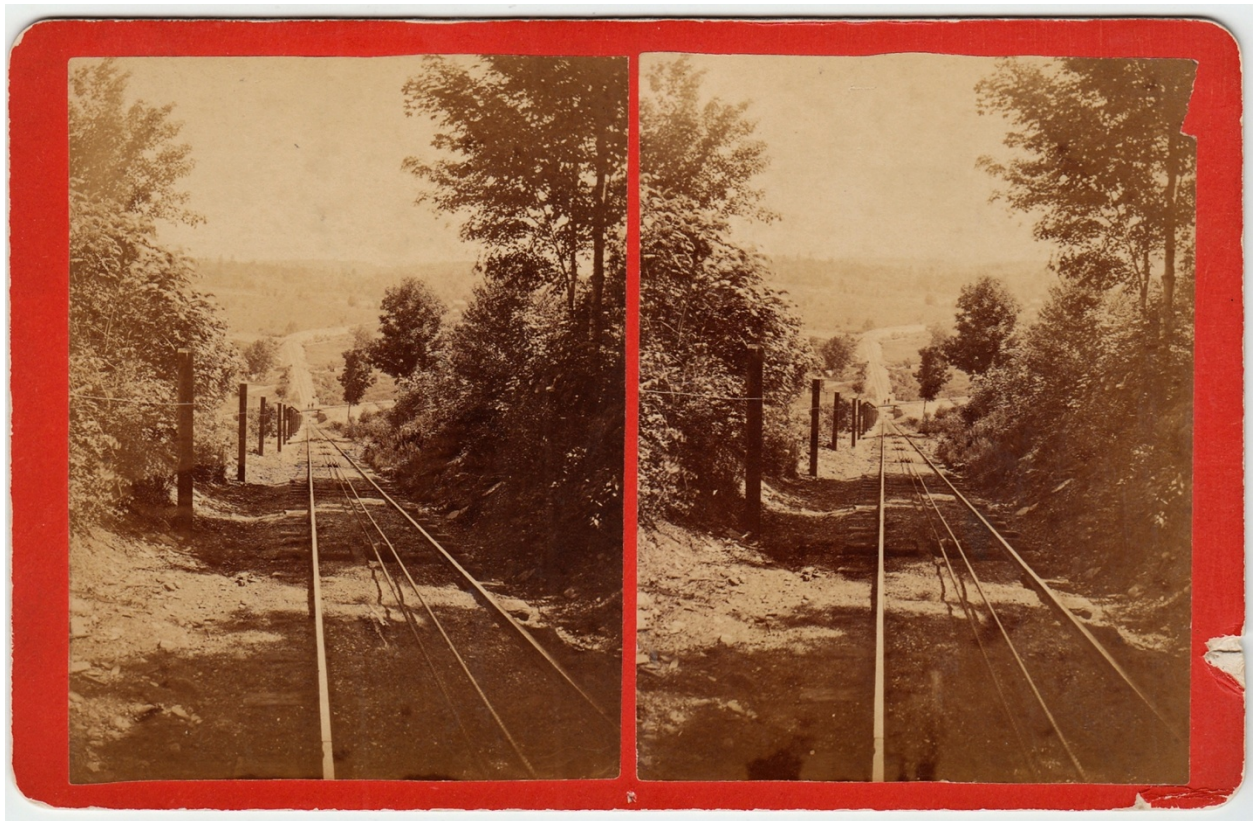
Hensel stereograph card No. 1108: *Looking up No. 16 Plane, Passenger Train on Loaded Track.*

This is the stereocard version of the same photo of Plane No. 16 that is given immediately above.



Hensel stereograph card No. 1109: *Looking Down No. 16 Plane*

This is the stereocard version of the same photo of Plane No. 16 that is given above.



Plane No. 16. Note that on this map, the exact location of the "Old Wheel House" (water wheel on this plane at one time; dotted line indication of raceway to water supply for wheel) is shown. Foot of this plane below the point where the Light and Loaded tracks crossed. The flag stop on the Loaded track is just to the west of the crossing of the two tracks.



The extensive race way from the Van Auken Brook to provide water for the wheel at Plane No. 16.

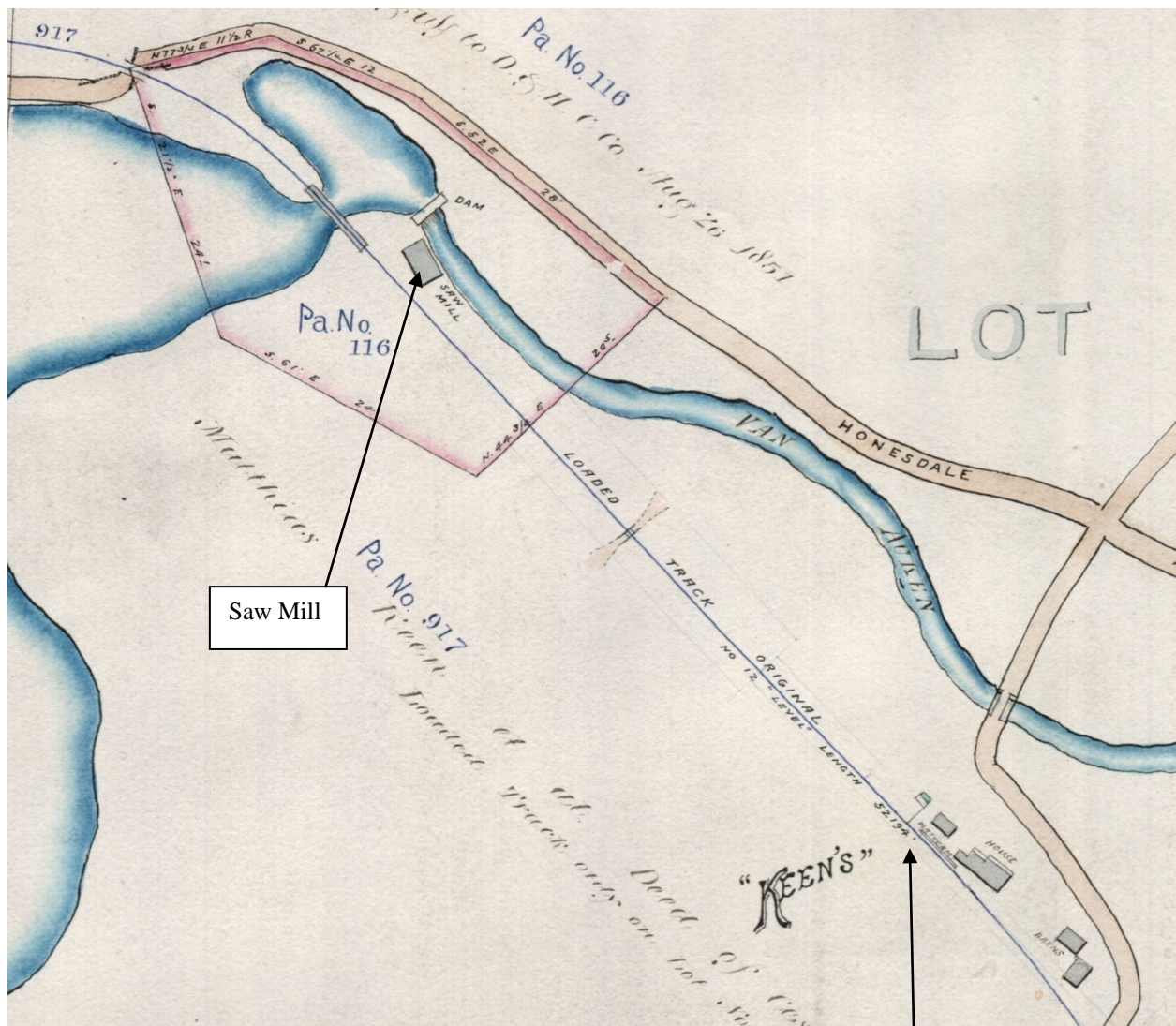
Head of Plane No. 16, 1843-1899

Engine house and boilers at the head of Plane No. 16

Keen's Station, loaded (on Level 12) and light (on Level 16), from 1895 Gravity Railroad map volume:

Loaded:

Note that Level No. 12 (1868-1899) in this area was formerly a portion of the Six-mile Level (1829). Note, also, that the Gravity Railroad, at Keen's, crossed the Honesdale and Clarksville Turnpike and that the loaded track, from 1843 to 1899, ran from here to Honesdale on the right hand side (the south?) of the Van Auken Brook (from Keen's Pond to Prompton) and the Lackawaxen River (from Prompton to Honesdale).



Saw Mill

Flag stop on the loaded track
(Level No. 12) at Keen's.

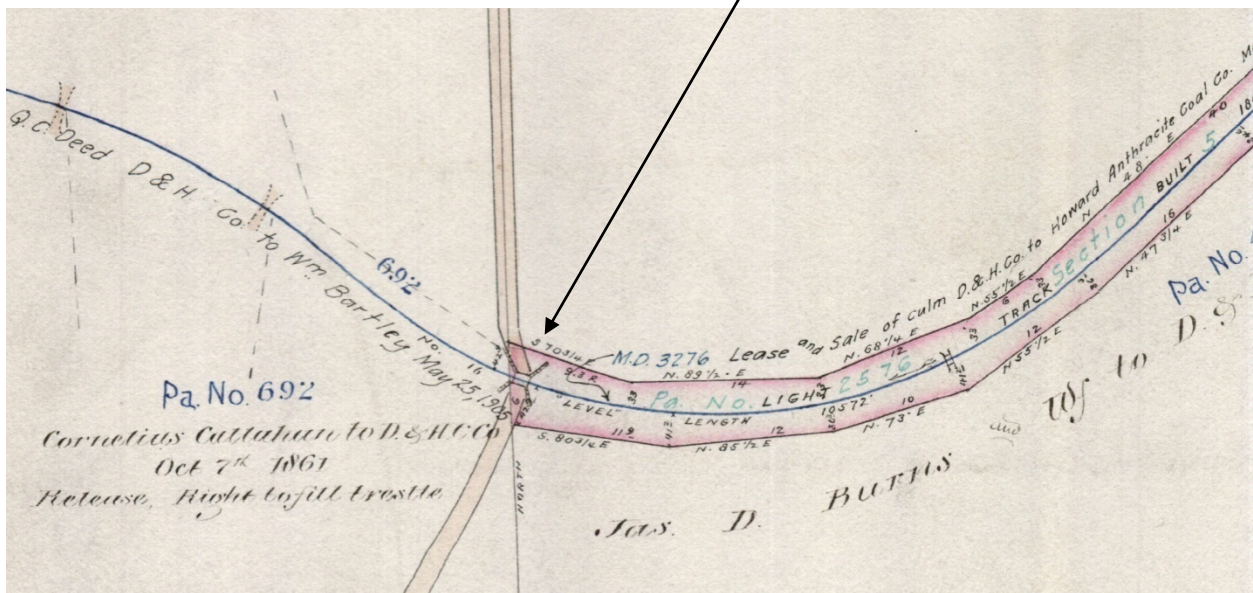
Light:



The passenger station on the light track at Keen's (on Level No. 16) was not too far distant from the passenger station on the loaded track.

Level 16: bridge foundation/culvert, from 1895 Gravity Railroad map volume:

Level No. 16 on a bridge over the wagon road. Rail traffic moved downgrade from right to left.



The foundations for this bridge still stand today.

Given below is a photograph by S. R. Powell that was taken in October 2011 of the bridge/culvert on Level No. 16 that is shown on the above map:



During Gravity Railroad days, the wagon road went under the bridge. At present, in the photo shown here, the wagon road is on the right side of the foundation.

From here, the light track descended to Keen's Pond and to the foot of Plane No. 17.

Hensel stereocard No. 1110-1111: two different views:

Hensel No. 1110-1111: *Island on Keen's Lake, seen from Light Track*

The loaded track passed by Keen's Pond on the Route 6 side of the Pond; the light track went up to Waymart on the back side of Keen's Pond; on the reverse of this card, the following notation about the identity of the person shown in this card, is given: "Wm Muir in profile. . This section of the Light track was Level 16.

William Muir, who probably accompanied Hensel as he photographed the Gravity Railroad in this section; possibly on Hensel's entire photographic tour.

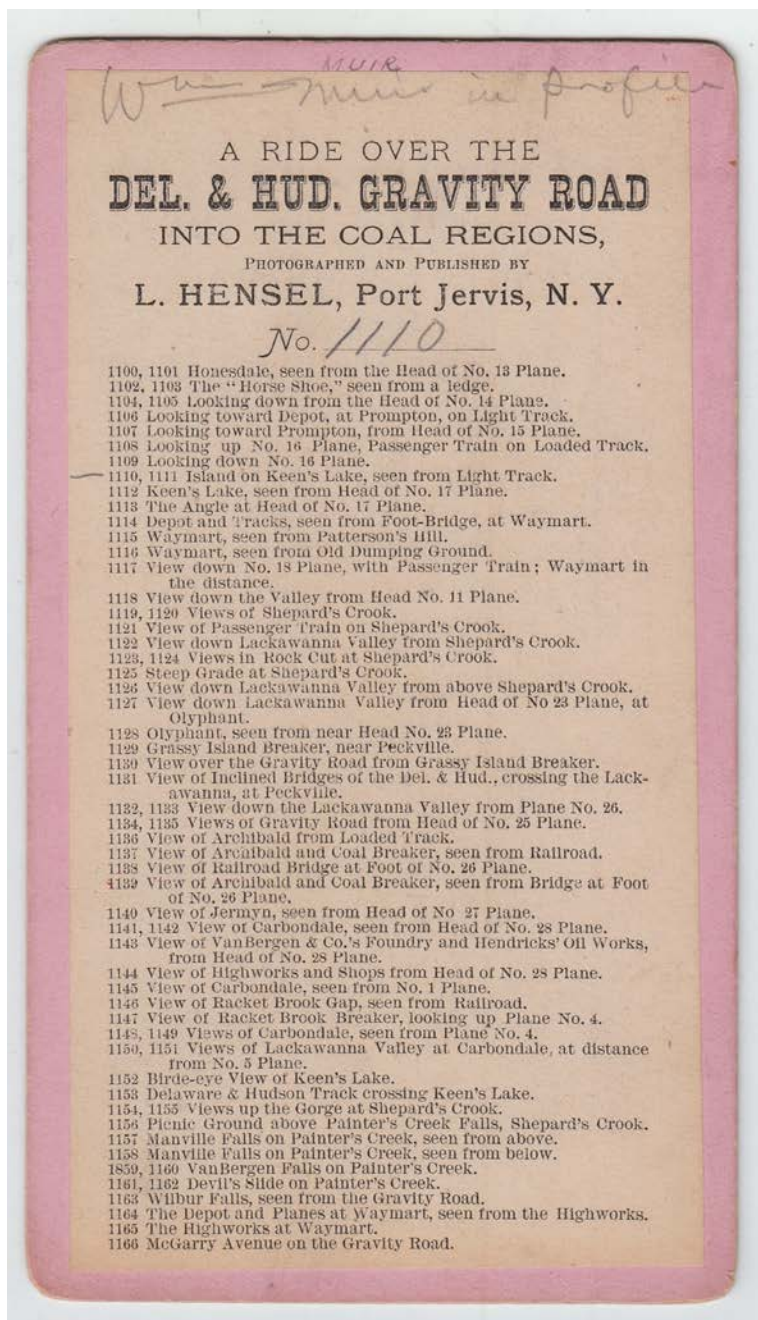
The island in Keen's pond



William Muir was the Superintendent of the D. & H. canal in 1891. He was one of a great many distinguished persons who attended the funeral services of D. & H. Superintendent Rollin Manville that took place in Trinity Church, Carbondale, on June 26, 1891.

Here is a photo of the back of the Hensel card shown above. Written at the top of the card is:

"MUIR / Wm Muir in profile"



Given below is the second view of the Island on Keen's Lake as seen from the Light track.
Hensel No. 1110-1111: *Island on Keen's Lake, seen from Light Track*

"The island on Keen's
Lake..."



Accidents, Facts about the Plane, and Daily Life

Rush Wright hurt while foolishly playing on Plane 16:

1881: "Rush, a son of Mr. Le Grand Wright, whose early years were spent here, but who has been for many years engineer at No. 4 on the D. & H. Gravity RR., between Waymart and Prompton [No. 4: probably means the fourth plane out of Honesdale, i. e., No. 16], had a narrow escape from a shocking death last week. It has been a favorite pastime with him, as with many

other boys, to slide down the rope on the plane, and on this occasion the rope was in motion, and instead of stopping at the foot, he went over the pulley. Eye witnesses expected to find him killed and terribly mangled. But he escaped with very little injury.” (*Carbondale Advance*, January 29, 1881, p. 3)

Legrand Wright was the engineer at Plane No. 16 at one time:

“Legrand Wright, formerly engineer at No. 16, but now engineer at the Dickson works at Scranton spent Sunday last with R. E. Weed at No. 9.” (*Carbondale Leader*, August 3, 1883, p.2)

Ellen Mealons hangs herself:

“The people residing near No. 16, on the ten mile level were thrown into a state of intense excitement last Tuesday by the rumor that Mrs. Ellen Mealons had committed suicide by hanging. An investigation proved it to be true. No cause for the rash act is known. She leaves a husband and three children.” (*Carbondale Leader*, October 5, 1883, p. 2)

Waymart minister walks to No. 16 to preach because pully car would not run:.

“Rev. Mr. Cole of Waymart, M. E. church started to go to No. 16 to preach last Sunday and took a pully car to ride on, but the car would not run so he had to walk and push the car in the bargain.” (*Carbondale Leader*, October 12, 1883, p. 2)

Narrow escape for two boys on their way to Keen's pond to fish:

1885: “**AN EXCITING RIDE.** / Last Thursday two boys from Prompton got on a trip of light cars to ride to Keen’s pond to fish. Eight cars make a trip over there. The boys got in the box of the seventh car and rode up one plane and over a level in safety, but at the head of No. 16 the trip was detached from the rope too soon and it started back down the plane. In going over the first trap two wheels of the car the boys were in jumped the track, and as they couldn’t get out the only thing they could so was to trust in Providence. The cars rushed on down the steep incline with lightning speed and when over half way down the plane the cars were thrown from the track. The car the boys were in got loose from the others and ran out in a field several feet from the wreck. The car remained right side up and the boys, though fearfully frightened, were uninjured and went to the pond and fished as they intended to do.” (*Carbondale Leader*, June 9, 1885, p. 1)

6842

Plane No. 17

-- Plane 2,169 feet long (rise 185.70 feet)
--Level 17: 6,869 feet long (fall 54. 76 feet)
--see Water-wheel note, pp. 352-53

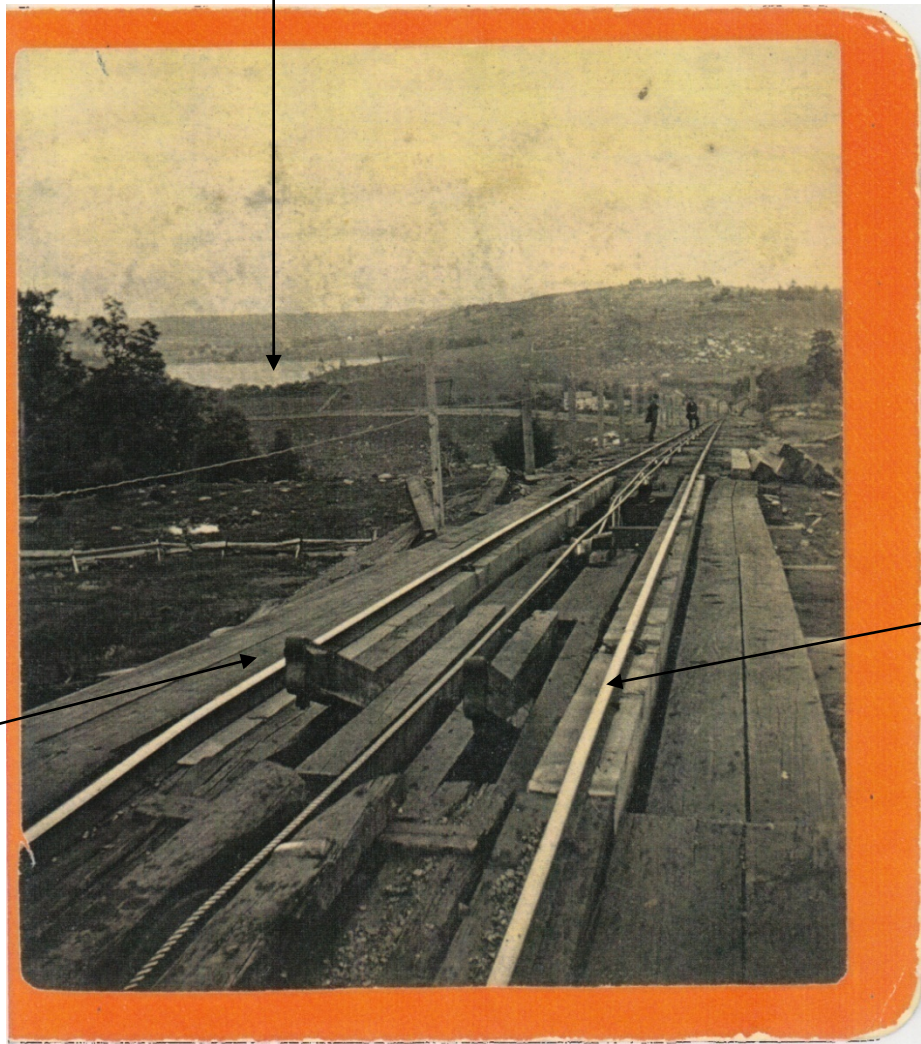
At this plane, No. 17, the engine-house was about one thousand three hundred feet below the head of the plane.

Hensel, No. 1112: "Keen's Lake, seen from Head of No. 17 Plane"

Shown here is an electronic scan of a paper copy from one-half of an original of the stereocard; paper copy in the collection of the Minisink Valley Historical Society. Copies of this stereocard are very rare.

Keen's Pond, as seen from the head of Plane No. 17. The engine house was about 1,300 feet below the head of the plane.

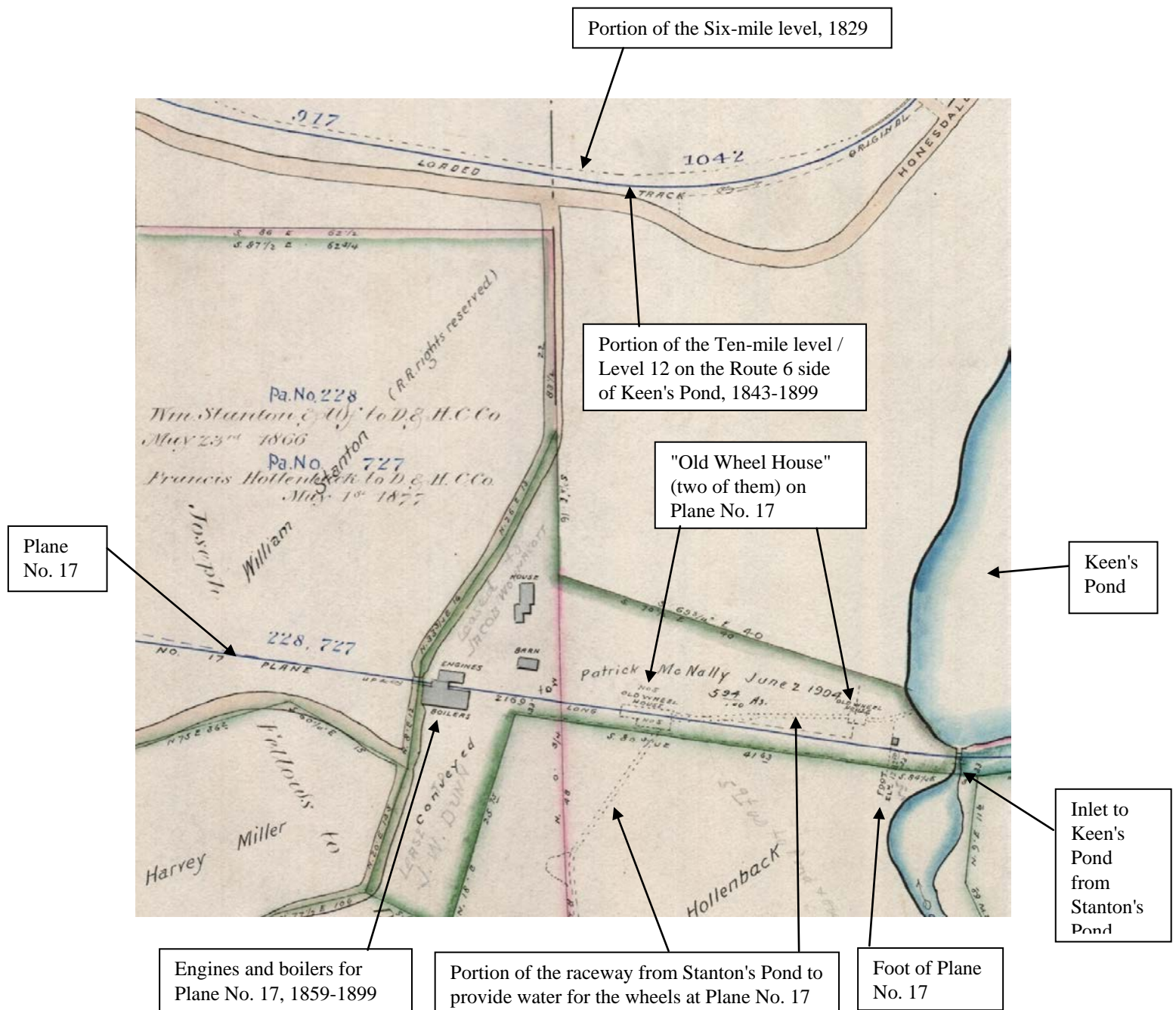
A pair of "dogs" was at the head of every plane. Cars coming up the plane pressed down the dogs as they passed over them. After the cars passed over, the dogs would raise up again. If a car tried to slide back down the plane, it would be prevented from doing so by the dogs, which caught an axel on the car and stopped it. When the first car of a trip cleared the dogs, the engineer cut the power. Forward momentum brought the rest of the cars over the head slowly and the headman loosened the sling from the cable in the plane.



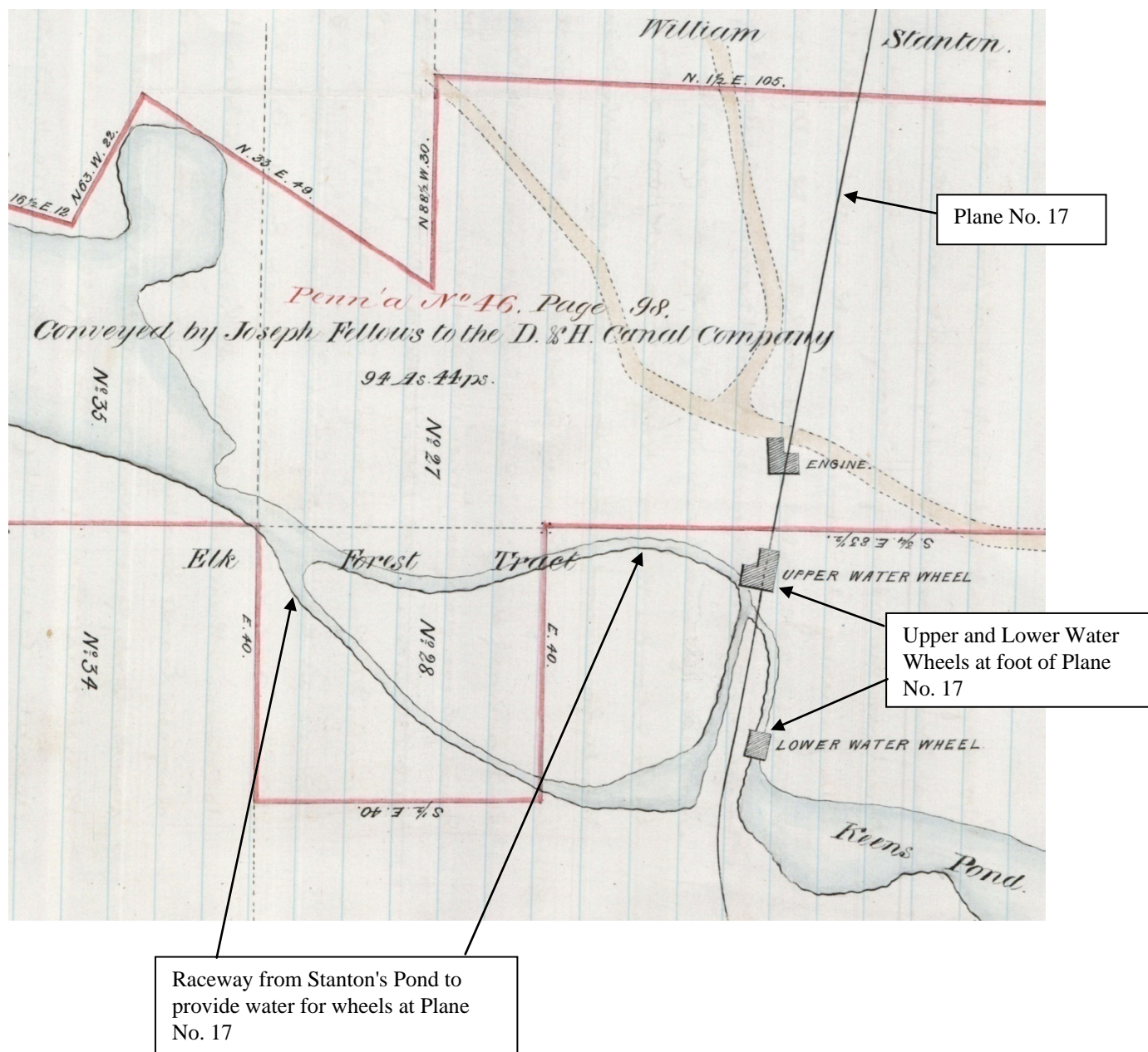
The head of Plane No. 17

1895 Gravity Railroad map:

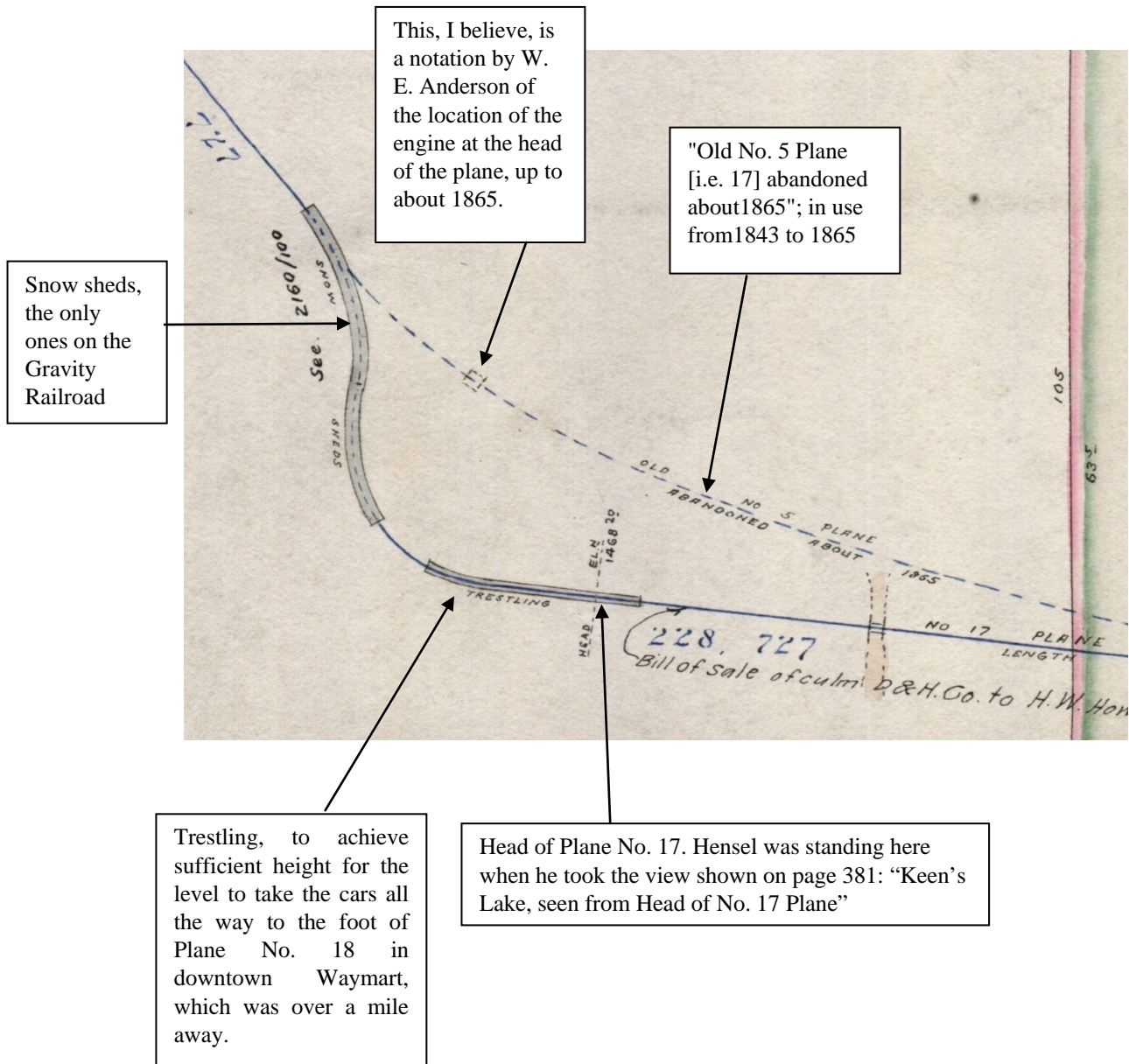
The foot of Plane No. 17 (a very short distance west of the Western edge of Keen's Pond—where the outlet of Stanton Pond flows into Keen's Pond); the engine house, and portion of Plane 17 itself are shown on this map; also shown on this map is the location of "No. 5 Old Wheel House" and the raceway—dotted lines—from Keen's Pond to supply water for the wheel. Plane 17, which was the 5th plane on the light track out of Honesdale, was 2,169 feet long.



The foot of Plane 17 is also shown on the map that illustrates the deed, dated July 1, 1845, between Joseph Fellows and The Delaware and Hudson Canal Company. The deed is in the D&H Deed Book, PA, p. 27; the map is on page 28. Given below is the relevant portion of that map. Note that there are two water wheels here, Upper Water Wheel and Lower Water Wheel. The Engine House is directly above the Upper Water Wheel.



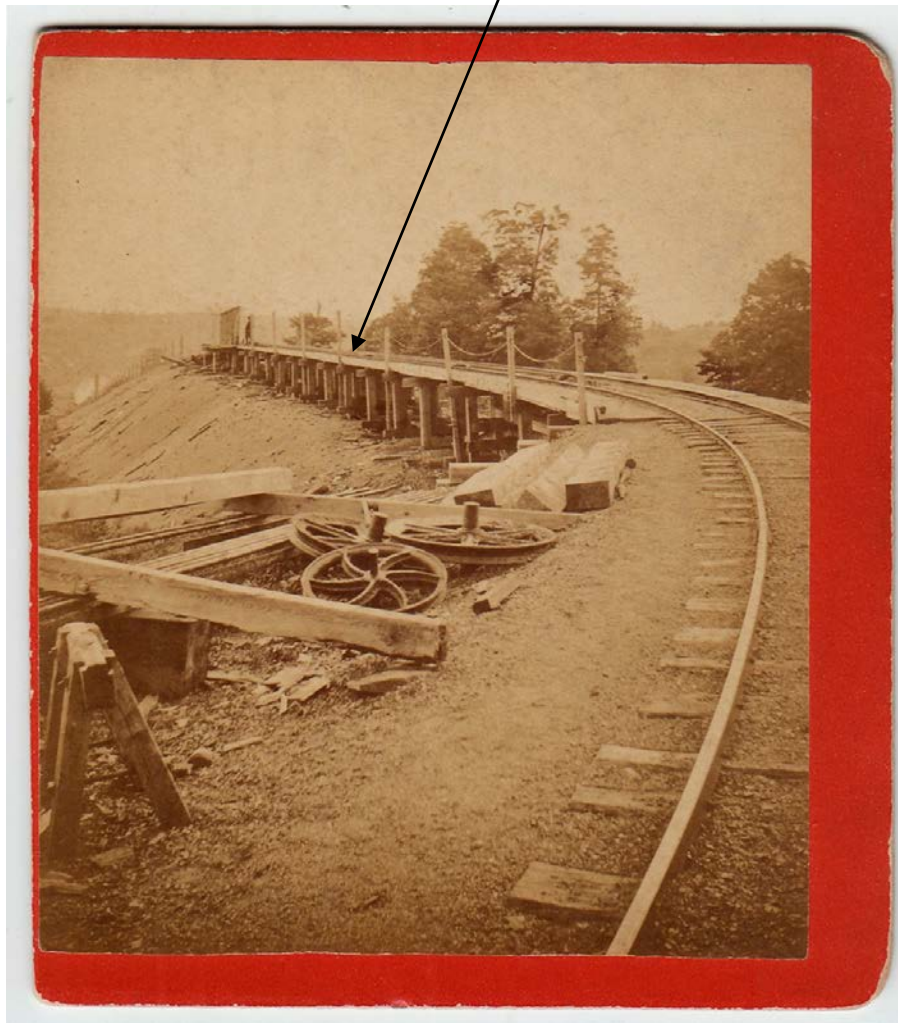
Head 17:



Once the light cars and passenger vehicles were pulled up Plane 17 and disconnected from the cable, they rolled down Level 17 (6,689 feet long) into Waymart. There was an angle in the track at the beginning of the level; also a short distance from the beginning of the level there was a trestle. Here is a view of the site by Hensel:

Hensel stereograph card No. 1113 (1/2 card in collection of Carbondale Historical Society): *The Angle at Head of No. 17 Plane.*

Trestling at the beginning of
Level No. 17



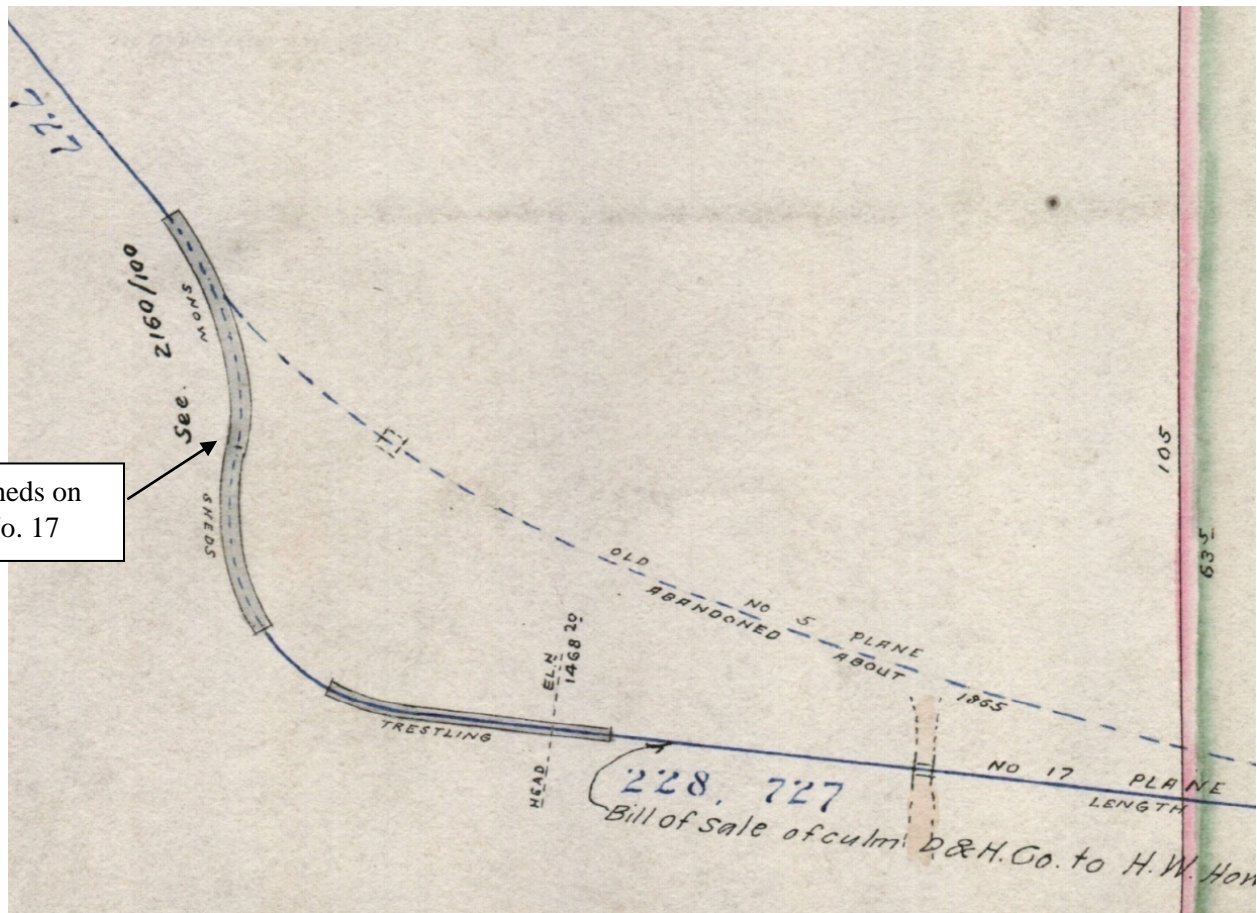
6843

Snow Sheds on the Gravity Railroad, and Rail Bridges over the Gravity Railroad on the Western Side of the Moosic Mountain

Snow Sheds

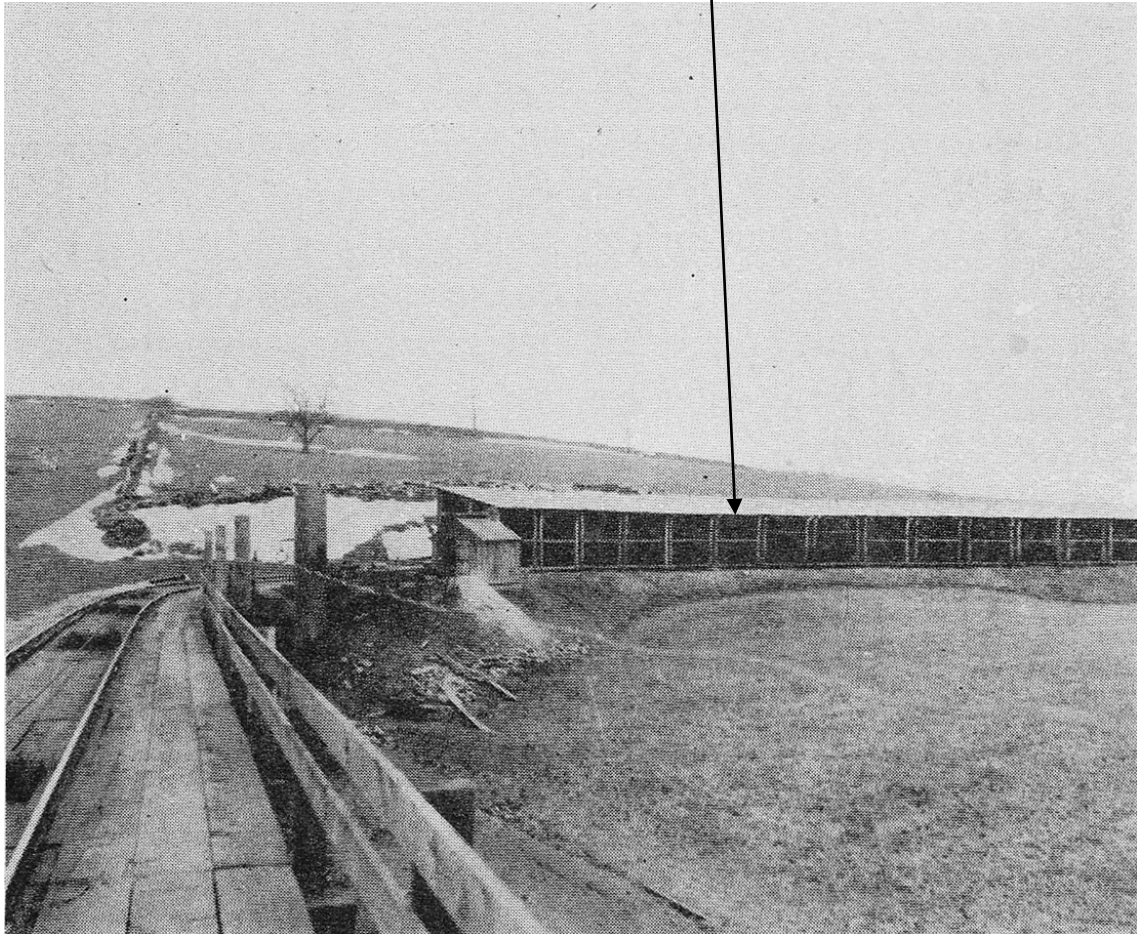
Just beyond the trestling at the beginning of Level No. 17, there were S-shaped snow sheds on this level. These were the only snow sheds on the Gravity Railroad. Here is a view of the appropriate section of the 1895 Gravity Railroad map that shows these snow sheds:

1895 Gravity Railroad map volume:



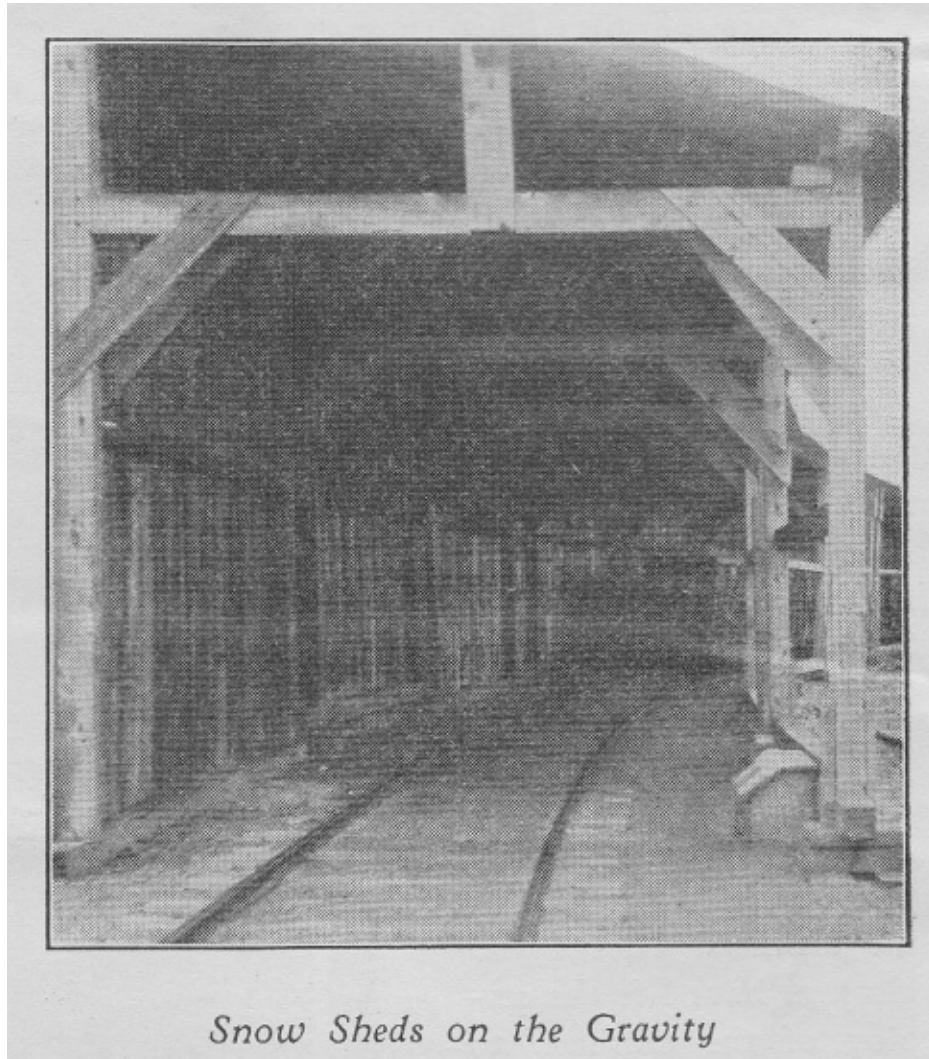
Given below is a photograph of these snow sheds that is in the collection of the Minisink Valley Historical Society:

Snow sheds on Level No. 17



Snow shed on Gravity Railroad:

Photo on page 196 of N. H. Hiller article, "Up Hill and Down Dale by Gravity Rail," pp. 196-198 in July 1, 1931 issue of *The Delaware and Hudson Railroad Bulletin*:

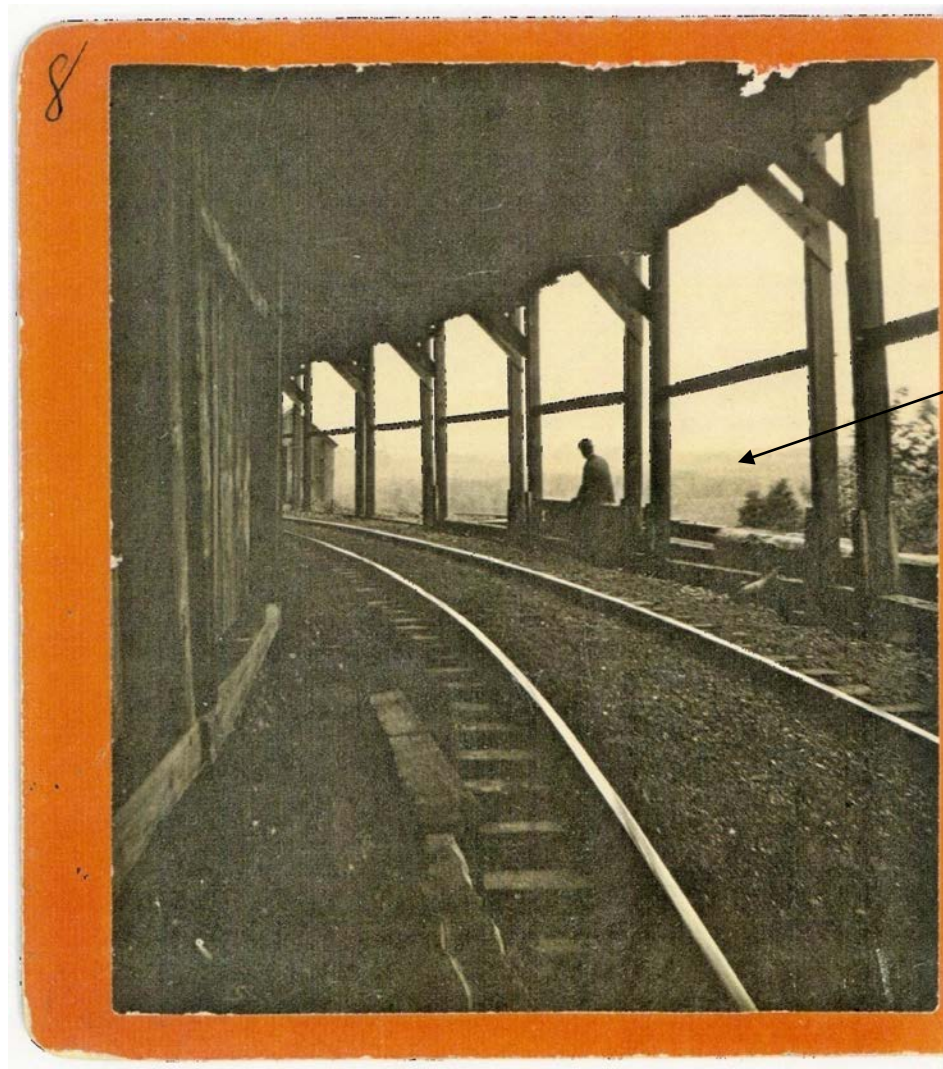


N. H. Hiller: "Operations during the winter months were seriously interrupted by snow fall, and the starting of long trains on the levels was difficult. Snow sheds had to be used where there was danger of drifting and, at one time, the Board of Managers authorized the enclosing of all the planes, although it was never carried out. It was not at all unusual to see employes clearing the rail with a broom from the front platform of a passenger train nor to see them starting a train with difficulty at some way station. The cars were connected by means of a chain coupler having considerable slack. The bumpers being spaced far apart, it was possible to jump upon the taut chain coupler and obtain motion to the train by bumping the cars together. The coal transported in winter was either forwarded via the Erie Railroad or stored in Honesdale until the opening of the Canal." (Our Own 'Gravity Road,' *The Delaware and Hudson Company Bulletin*, July 15, 1925, p. 11)

The only snow sheds on the D&H Gravity in 1895 are the ones that were constructed on Level 17, into Waymart. Several writers have said that there were snow sheds on the Moosic Mountain and have identified the above photograph as having been taken on the mountain at Farview, which is not the case. The snow sheds shown above are, as far as I have been able to determine, the only ones that the D&H constructed.

Lowenthal (p. 236) says: “One possible unforeseen result of the new venture [passenger service on the Gravity Railroad from Carbondale to Honesdale] was the need to construct snow sheds where drifting was a problem, since publication of a regular schedule carried with it some obligation to run trains at all times of the year. The D&H over Moosic Mountain came to resemble in this one respect the crossing of the Sierras in California.” Nonsense. The only snow sheds on the D&H Gravity Railroad were on Level 17.

Sal Mecca, who knows a lot about the Pennsylvania Gravity Railroad, says that there were no snow sheds on the Pennsylvania Gravity Railroad—so the interior view of snow sheds given below (color photograph from an original stereocard, possibly by Hensel, in the archives of the Minisink Valley Historical Society) must be on the D&H Gravity Railroad on Level 17.



The landscape and mountains that one sees through these sheds appears to match the site of the snow sheds on Level No. 17.

These snow sheds were probably not in existence on Level 17 when constructed initially, but were added at a later date, probably because of repeated snow drifting problems on Level 17. What must have taken place is this: the snow sheds were constructed, in response to a need, and then, when the sheds were completed and the tracks laid through the sheds and on into Waymart.

The photograph given below is by J. A. Bodie, Honesdale, and was taken before 1865, when the revised Plane No. 17 was installed. It is in the collection of the Wayne County Historical Society. On the back is written the following: "Upper half of #17."

Snow sheds, completed but not yet incorporated into the new alignment about 1865.

This is the head house that was "abandoned about 1865." These tracks, with cables in them, are a plane and not a level (on a level there are no cables in the tracks).



The "upper half" of Plane No. 17 (pre-1865) was done away with in 1865. As such, the length of Level No. 17 was increased by the distance cut out of Plane No. 17, which made Level No. 17 very long (6,689 feet long). When the new level and the snow sheds were incorporated into the system, the head of Plane No. 17 had to be elevated a few feet (hence the trestling at the head of the plane/beginning of the level) so that the cars would roll all the way into Waymart.

Why was there a trestle installed at the top/head of Plane 17? To get the empty cars high enough in the air so that they would roll all the way down the level (which was on another trestle from before the entrance of the level into “downtown” Waymart, all the way through town to just before the Depot, where the trestle ended and the level came back to grade) to the foot of Plane 18. The elevation at the Head of Plane 17/Beginning of Level 17 was 1468 20; the elevation at the Foot of Level 17/Foot of Plane 18 was 1413 44, which means that the empty cars descended 55 feet in altitude as they traveled the 6,869 foot-long level. Passengers from Honesdale, for example, could get off right there at the station on Level 17. By the same token, passengers for Honesdale could get on the passenger coaches at the same point, which was there on Level 12, which went all the way to Honesdale (which was all down hill from the beginning of Level 12, not far from the Depot in Waymart. Loaded coal cars, of course, could also roll down the level from there at the beginning of Level 12 and out of town and then on down the level to Honesdale.

Rail Bridges over the Gravity Railroad on the Western Side of the Moosic Mountain

There were three rail bridges over the Gravity Railroad on the Western side of the Moosic Mountain:

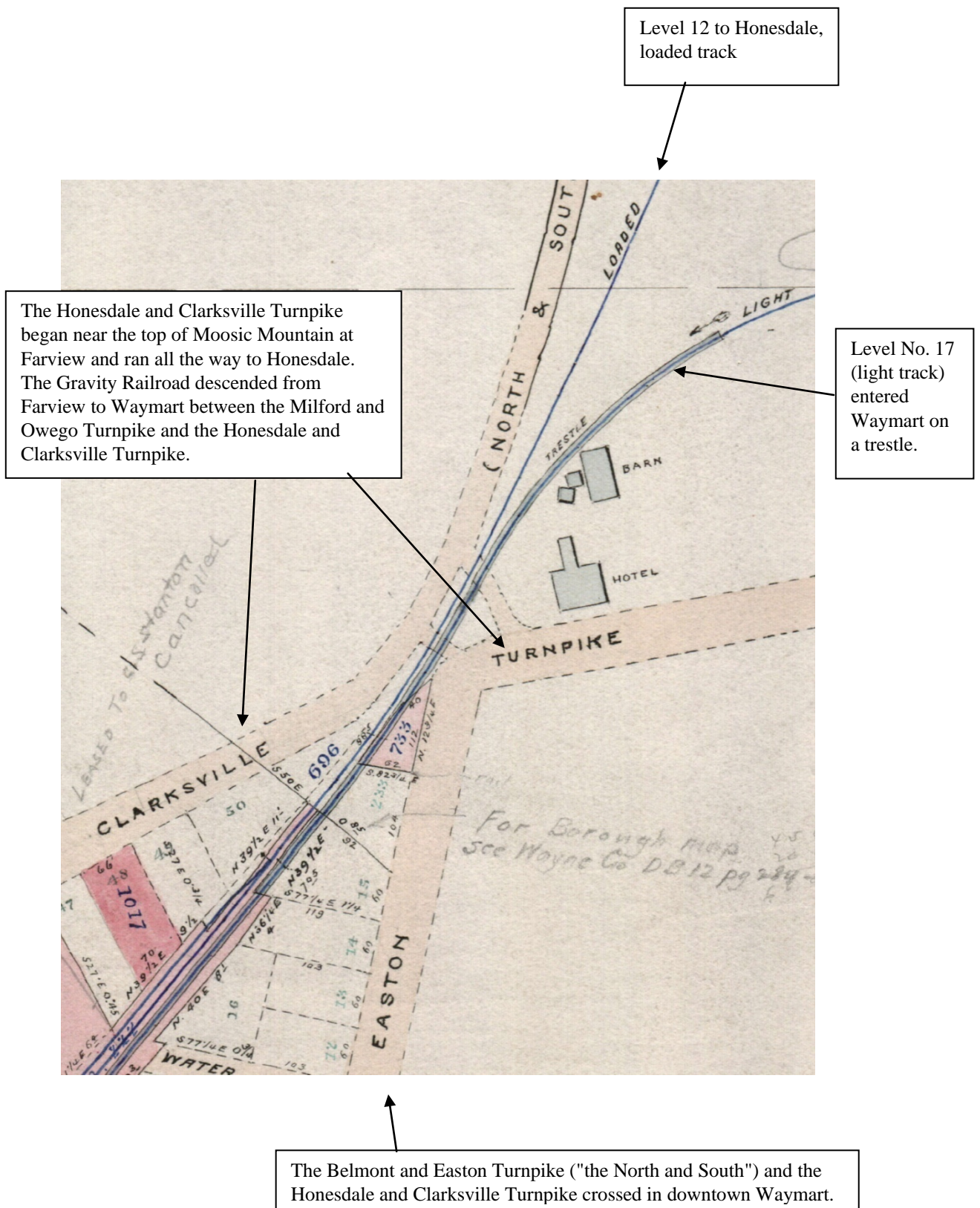
1. the cripple car bridge over Plane No. 2 (see page 167, herein)
2. the light track bridge over the foot of Plane No. 3 (see page 182, herein)
3. the light track bridge over Plane No. 5 (see page 213, herein)

6844

The Planes and Levels in “downtown” Waymart:

Map View No. 1:

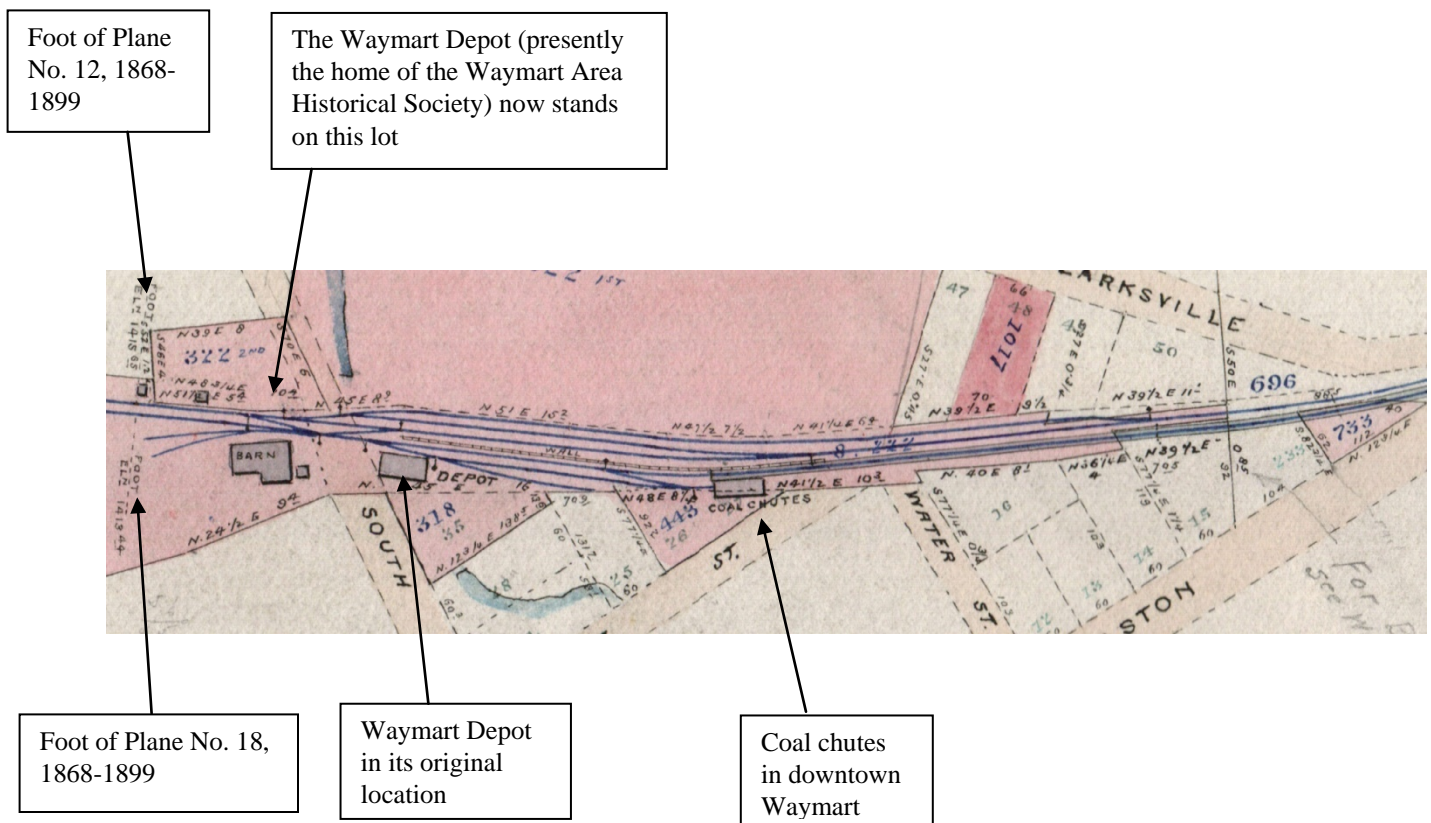
Level 17, Light track, enters town, upper right, track on a trestle, which runs all the way through town until the end of the “coal chutes.” Level 17 continues, down grade, to the foot of Plane 18, which is a short distance west of the Depot.



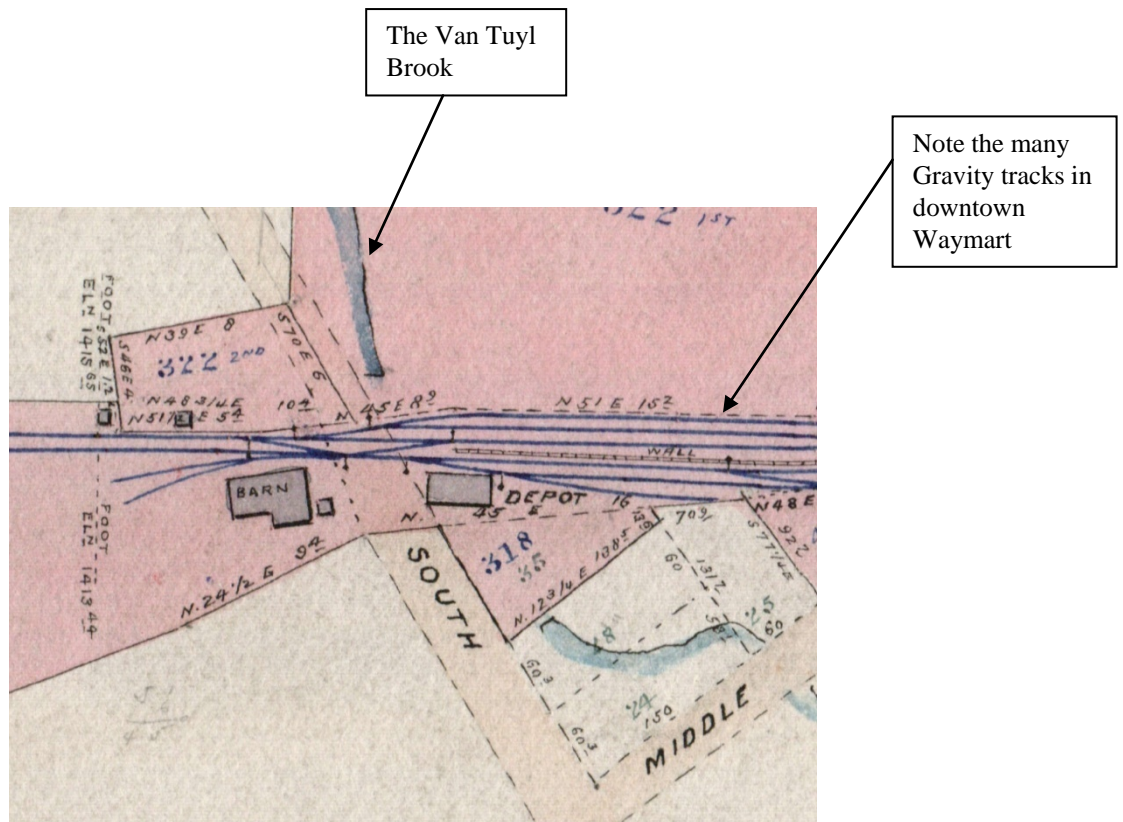
Map view No. 2:

Level 12, Loaded track, descends along the trestle, heading largely East, and goes out of town, South of "the North & South," towards Honesdale.

The Waymart Depot is on the South side of Level 17 on the Light track; Level 12 on the Loaded track is directly opposite the Depot, which would have made it very convenient for passengers traveling in either direction to get the train. The present Depot in Waymart is the same building, but restored and moved to a new location, cater corner from where it stands on the map shown below, i.e., across the tracks from the barn (site of present Borough building) to the west of where it is shown on the map below. Note that the foot of 18 and the foot of 12 are directly opposite each other, on the extreme left on the map below.



A closer look at the Waymart Depot area. Note the waterway that runs under all the tracks and the depot on the east side of South Street. It's the Van Tuyl Brook, which starts on the Moosic Mountain at Farview and runs down into Waymart.



Hensel views of Waymart:

L. Hensel, No. 1114: "Depot and Tracks, seen from Foot-Bridge, at Waymart."

Waymart Depot is shown here in its original location. Track to the left of the Depot is Level 17, which descends to the foot of the level (which is behind where Hensel took the picture from). Second track to the left, with cut of four loaded coal cars on it, is on Level 12, which descends, away from where Hensel is standing, in the direction of Honesdale. This is a very staged photograph—people, horses, cut of loaded coal cars—all posed and ready for Hensel.

Level No.12, with cut of loaded coal cars on their way to Honesdale

Waymart Depot in its original location

Level No. 17, descending to the foot of the level.



Track for switching from light to loaded and vice versa

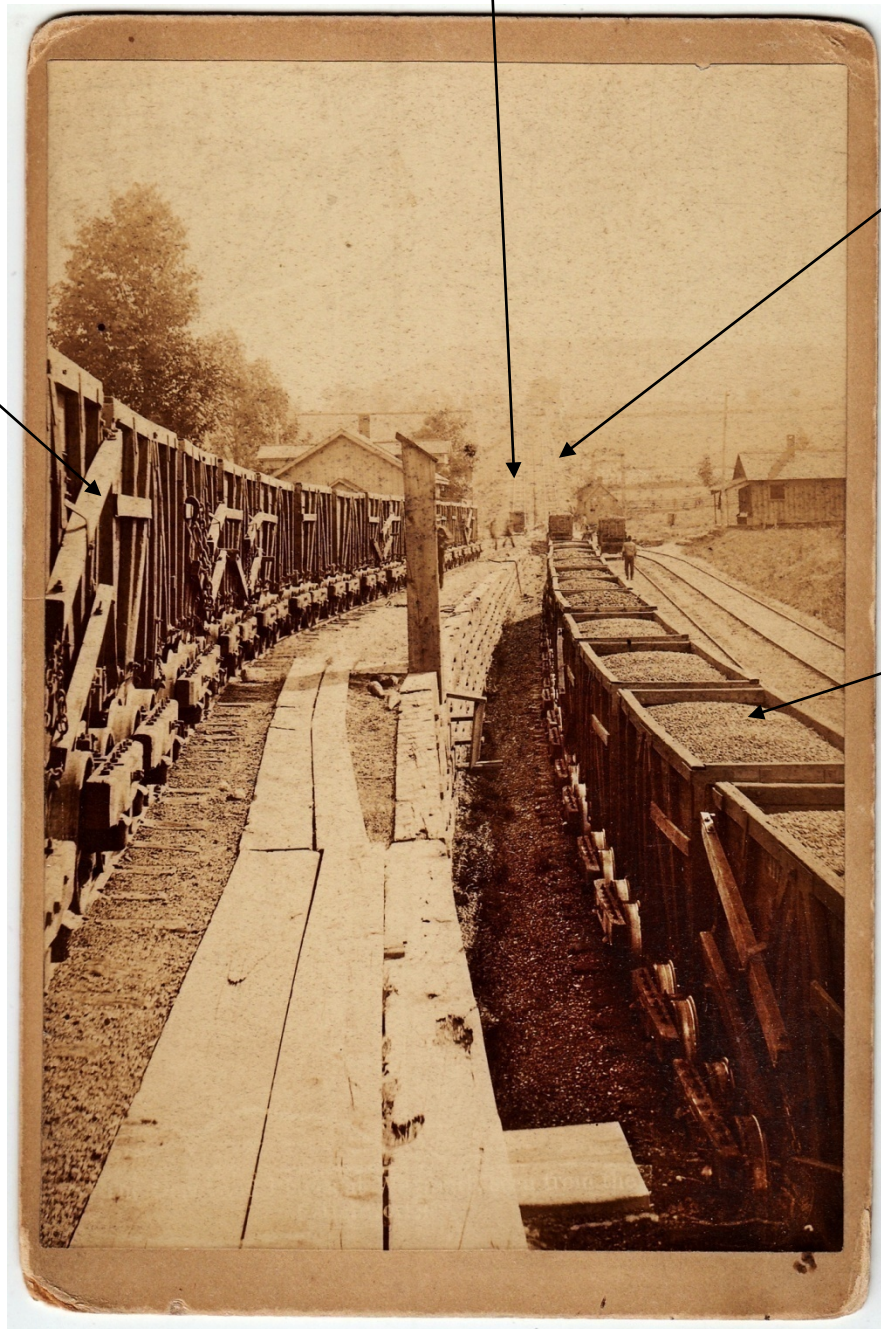
In the photograph given below, we see the end of Level 17, on the left, and the beginning of Level 12, on the right, in downtown Waymart. With Planes No. 12 and 18 in the distance, center of the photograph. Photo by an unidentified photographer in the collection of the Carbondale Historical Society:

Plane No. 18, 1868-1899

Plane No. 12,
1868-1899

Empty Gravity
coal cars on
Level No. 17

Loaded coal cars
on the way to
Honesdale on
Level No. 12

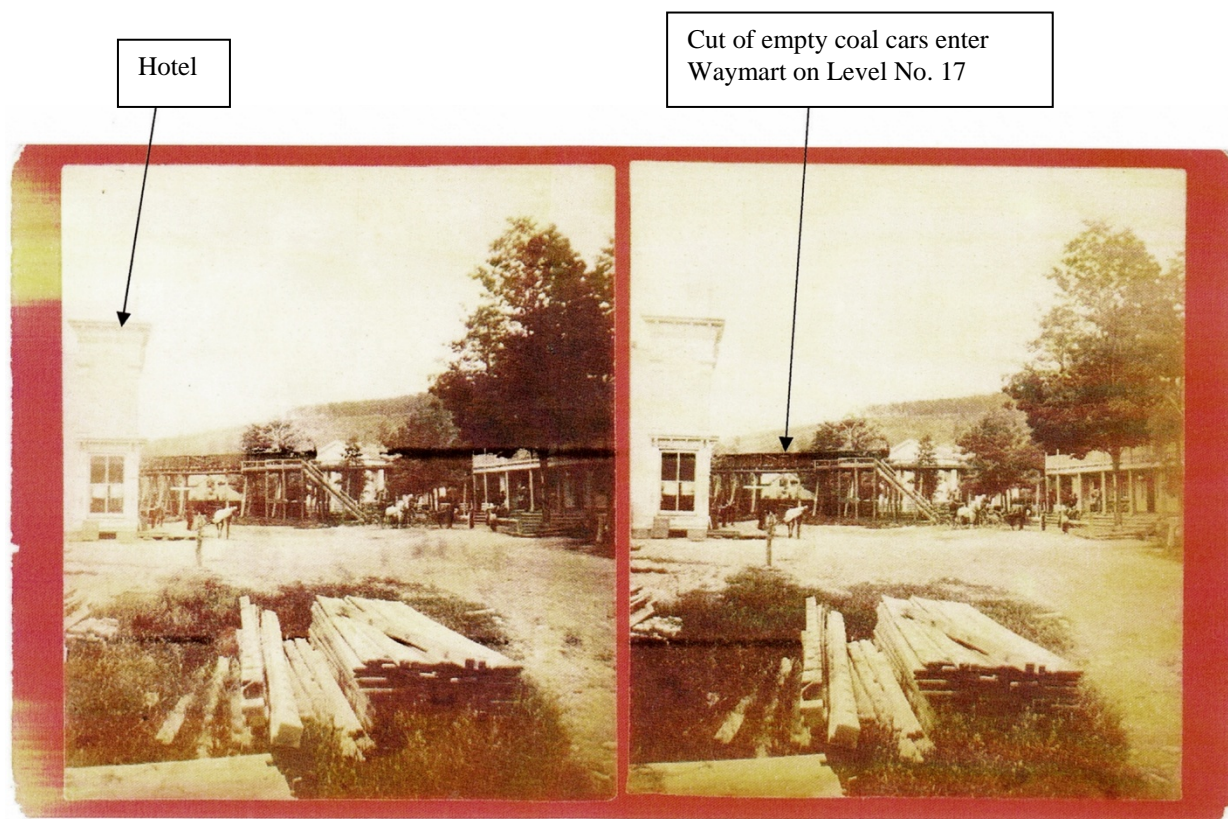


L. Hensel, No. 1115: "Waymart, seen from Patterson's Hill"

What are the Waymart landmarks seen in this photograph from Patterson's Hill?



Hensel? Number and Series? **Light track, Level 17**, showing trestle passing through Waymart, with cut of empty cars moving West (to the left), down the grade.



Level 12

Level 12 began in Waymart. From Waymart to Keen's Pond, it ran more or less on the same roadbed as the 1829 roadbed, which was to the left of the Honesdale and Clarksville Turnpike.

Just past Keen's Pond, the 1829 track (which became known as the loaded track after 1843; also Level 12) crossed the Honesdale and Clarksville Turnpike and the Van Auken Brook and ran to Prompton to the right of the Van Auken.

From 1829 to 1843, it (Level No. 8) crossed the Lackawaxen at Prompton and continued (on the Four-mile Level) between the turnpike and the Lackawaxen all the way to Honesdale. In 1843, when the Four-mile Level was done away with, and the Ten-mile Level created, the loaded track, from Keen's Pond to Honesdale was on the right side of the Van Auken and the Lackawaxen all the way to Honesdale.

Accidents, Facts about the Plane, Daily Life

The material given below on Moules vs. Delaware & Hudson Canal Company was located and made available to S. R. Powell by John V. Buberniak in October 2008:

The legal discussion and appeal presented below is a remarkable document, of great importance with regard to the technical operation of Plane No. 17. In no other document, anywhere, are the operational details of this plane set forth.

"MOULES v. DELAWARE & HUDSON CANAL COMPANY. The test of the liability of an employer to an employee is negligence and not danger, and where. In an action for damages for personal injuries, if the testimony fails to establish any negligence on the part of the defendant, binding instructions should be given to the jury to find for the defendant. The honest exercise of his judgment by a competent employee in the course of his employment can never be negligence to make the employer liable to a co-employee. Appeal of the Delaware and Hudson Canal Company, defendant, from the judgment of the Court of Common Pleas of Wayne county, in an action of trespass by Laura Moules, to recover damages resulting from alleged negligence of defendant in causing the death of her husband. Abram Moules, plaintiff's husband, was employed as conductor of a coal train on the defendant's railroad between Honesdale and Waymart, in Wayne county. The railroad is what is known as a "gravity" road. From Waymart to Honesdale, a distance of ten miles, the "loaded track," or track on which the loaded cars run, has a very light descending grade, and is called a "level." On the "light track" on which the empty cars return to Waymart there are five inclined planes, and as many "levels" of light grade between the planes. The light cars are drawn up the planes by stationary engines. An endless wire rope runs between the head and foot of the plane. The cars are attached to this by a "sling," consisting of a chain some four feet long, with a hook at each end, one of which is hooked into a link on the car, and the other into a link in the rope. The trains are composed of from forty-eight to ninety-six cars, manned by three runners, the chief of whom is called the conductor. Besides his supervision of the train, the conductor's work is the same as that done by the others. The light trains are generally run in three sections, each in charge of a runner, and drawn up the planes in "trips" of twelve cars each, the conductor usually going up on the last trip. At the time of the accident Moules was standing, with his face toward the rear, on a trip of light cars which had just passed "over" a plane, and was running on the "level" at a speed of four or five miles an hour. / He had ridden in this position about one hundred and fifty feet, when his "trip" ran into another standing on the track, and he received injuries that caused his death. At this plane, No. 17, the engine-house is about one thousand three hundred feet below the head of the plane. Communication between the head and the engine-room is maintained by a bell and cord. At the head of the plane is a lever, by which the cord may be pulled and the bell rung, so arranged that a brakeman on the back of a car can strike it with his foot in passing. The bell cord may also be pulled by hand from the side of the track. At the head of the plane 17, about one hundred and fifty feet beyond the angle of the plane, is the shieve-wheel, or drum around which the rope passes. Near this point the track begins to curve to the right. About one hundred and twenty-five feet further a snow-shed begins, which extends over the track for some distance on the curve. It is open on the side towards the plane. Between the shieve and the snow-shed, on the right side of the track, is a small shanty, with a door on the side towards the angle. In going up the plane the runner in charge of the trip rides on the forward truck of the first car. On reaching the lever at the head, he kicks it, and then gets on the forward bumper to unhook his trip from the rope. The engineer, on the ringing of the bell, begins to shut off steam, and shuts it all off, before the trip reaches the shieve. The runner, holding to the front of the car with his left hand, reaches down, and with his right hand unhooks the sling from the car; as the lower hook drops from the link in

the rope, he draws up the sling, and hangs it on a cleat on the side of the car. He then controls the trip by the brakes, and sometimes by use of "blocking-sticks." If the weather is good, each runner proceeds at once with his trip to Waymart. If there is snow falling, or rain freezing on the rail insufficient [possibly "sufficient"] to impede the movement of a trip of cars, the trips are stopped at the snow-shed until the last arrives, and then all are run to Waymart together. It is the practice of every runner, on going up the plane and over the angle, to look ahead to see if there are cars standing in the snow-shed, and, if there are, to check his trip, after unhooking so as to prevent a collision. January 7, 1889, about noon, Monk's' train, consisting of forty-eight light cars, reached plane 17. It was storming, but not violently, with snow and rain freezing on the rails, and the wind from the direction of Waymart. The first runner, Henry Sohn, took up two trips of twelve cars each, and, by direction of John Ryan, a foreman employed by defendant, stopped them in the snow-shed to wait for the remainder of the train. The next runner, Ambrose Hoyle, followed with a trip of twelve cars. He did not know that Sohn had stopped, but had no difficulty in seeing his cars in the snow-shed. He ran his own trip into the snow-shed, coupled it to Sohn's, and put down a brake at the rear to hold them. Ryan told him to leave his brakes on, and go out ahead, and let Moules raise them. Hoyle, however, instead of leaving his brakes on, raised them, thus allowing the cars to start, and then started for the head of the train. Meantime Moules had taken up the last trip, of twelve cars, and, after unhooking and hanging up his sling, stood or sat on one of the cars, faced to the rear of the trip, apparently to avoid the storm coming from the opposite direction. His trip had gone about one hundred and fifty feet after unhooking, when it ran into Hoyle's, and Moules was caught between two cars, receiving fatal injuries. Verdict for plaintiff for \$1,250, and judgment thereon. Defendant appeals. For appellant, P. P. Smith and If. Wilson, Contra, Oeo. S. Purdy, Esq. Opinion by MITCHELL, J. Filed April 20, 1891. We fail to find in this case any evidence of defendant's negligence, nor is it easy to ascertain with precision just what negligence is charged. The learned judge put it to the jury entirely on the method of managing the trips at the head of the plane, — whether it was such as furnished reasonable protection to the trainmen; while the argument of appellee here rests mainly on the action of Ryan in stopping Hoyle, when about to go back for the purpose, as he alleged, of notifying Moules. Appellee also argues negligence from the absence of a headman on that day; but as the evidence showed without contradiction that it was not usual to have a headman, and that when he was there it was not to give notice to train runners, but for entirely different duties, the learned judge below properly excluded this question from the consideration of the jury, and we need not discuss it here. There was no evidence on which the jury could properly find that the method of managing the trips was negligent. We have had occasion several times lately to say that the test of liability of an employer to an employee is negligence, not danger, but here there was no evidence even of danger to a man of reasonable prudence. What Moules had to do was to unhook the sling, ring the bell to notify the engineer, and get on the car again so as to control the brake, if necessary. During this operation the cars were moving, as Hoyle, the plaintiff's mainstay, and certainly a friendly witness, says, "a little faster than a common man could walk," and "there was no difficulty in getting on or off." This method had been followed for years, without accident, and as a part of the business of railroading it certainly could not be said to be inherently

dangerous. In this particular case the deceased had been employed at this work seventeen years, and was entirely familiar with it; the other cars with which his collided were in plain sight; both Sohn and Hoyle, who preceded him by a few minutes, had brought their trips up, under the same circumstances, without difficulty; and the uncontradicted evidence on plaintiff's own part was that, even if the deceased had not seen the cars until close at hand, there was no difficulty in jumping off so as to avoid personal injury from the collision. To allow a jury, under these circumstances, to find that the method of operation was negligent, as well as dangerous, would be not only allowing them, as said in *Tltun v. Railroad Co.*, 136 Pa. St., 618, to dictate the customs and control the business of the community, but to do so without evidence. But was Ryan negligent in stopping Hoyle on his way back to notify Moules? Hoyle says he did not inform Ryan of his intention in going back. There was therefore no express notice to Ryan of Hoyle's intention. Nor could notice be implied from custom, for no custom was proved. The only evidence bearing on that point was given by Hoyle in rebuttal. It was not properly rebuttal, but the very essence of plaintiff's case; but, taking it as it was given, it amounts to no more than evidence of the witness' individual habit, not adopted by other train runners, and not known to Ryan. Nor, lastly, could any obligation upon Ryan in regard to notice to Moules arise from the danger of the situation. The matter of danger has already been discussed. It was usual on stormy days to stop the cars at that point and double up the trains. Moules knew the custom, for he had been engaged seventeen years in this work. Whether or not that day was one calling for doubling up was a matter to be determined by Ryan, and Moules knew this, and was bound to be on the lookout accordingly. Even if there was no actual necessity for doubling, and Ryan made an error of judgment in ordering it, of which there is no evidence whatever, it would not have been negligence. The honest exercise of his judgment by a competent employee, in the course of his employment, can never be negligence to make the employer liable to a co-employee. This branch of the case has been discussed on the concession that the defendant would be liable for Ryan's negligence. If it were necessary that point might at least be questioned. On the whole case there was no negligence proved, and defendant's seventh point should have been affirmed. Judgment reversed." *PITTSBURGH LEGAL JOURNAL*, Volume XXII, No. 52, August 1891-August 1892.

Charles Price killed when he jumped of loaded cars on Plane No. 17:

March 13, 1875: Charles Price, at Waymart, boy 16 years old; jumped off loaded cars at No. 17 plane, and falling under the cars was instantly killed. (*PA Auditor General Report 1875*, p. 231)

6845

Plane No. 18

--1,760 feet long (rise 137. 72 feet)

--Level 18: 1,068 feet long (fall 9.71 feet)

Engineers at the head of the plane:

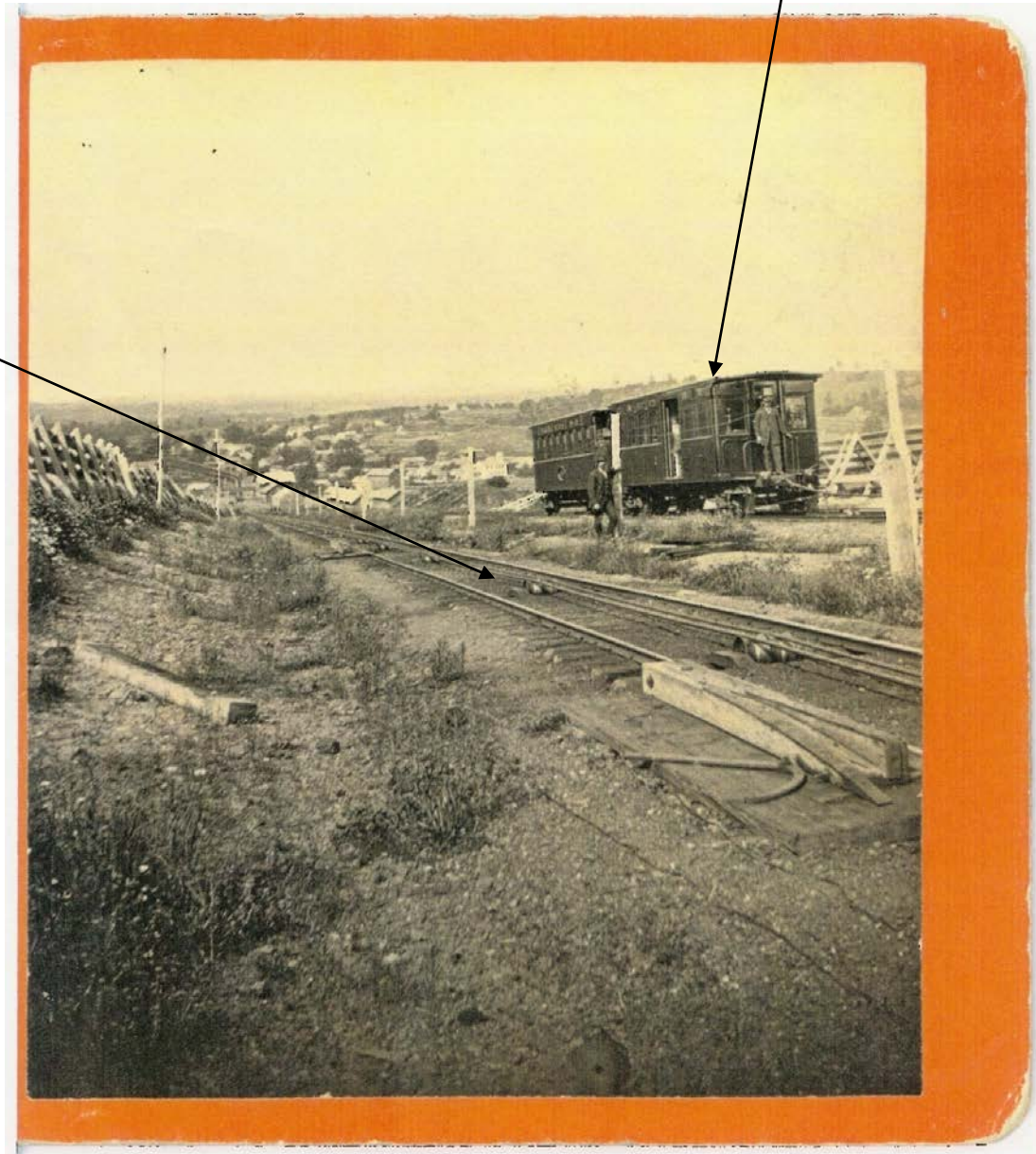
“No. 18. Light track between Farview and Waymart, Samuel Tillsley was engineer from 1865 to 1877, and C. O. Ellis from that time on.” (*Joslin/Davies*)

L. Hensel, No.1117: "View down No. 18 Plane, with Passenger Train; Waymart in the distance."

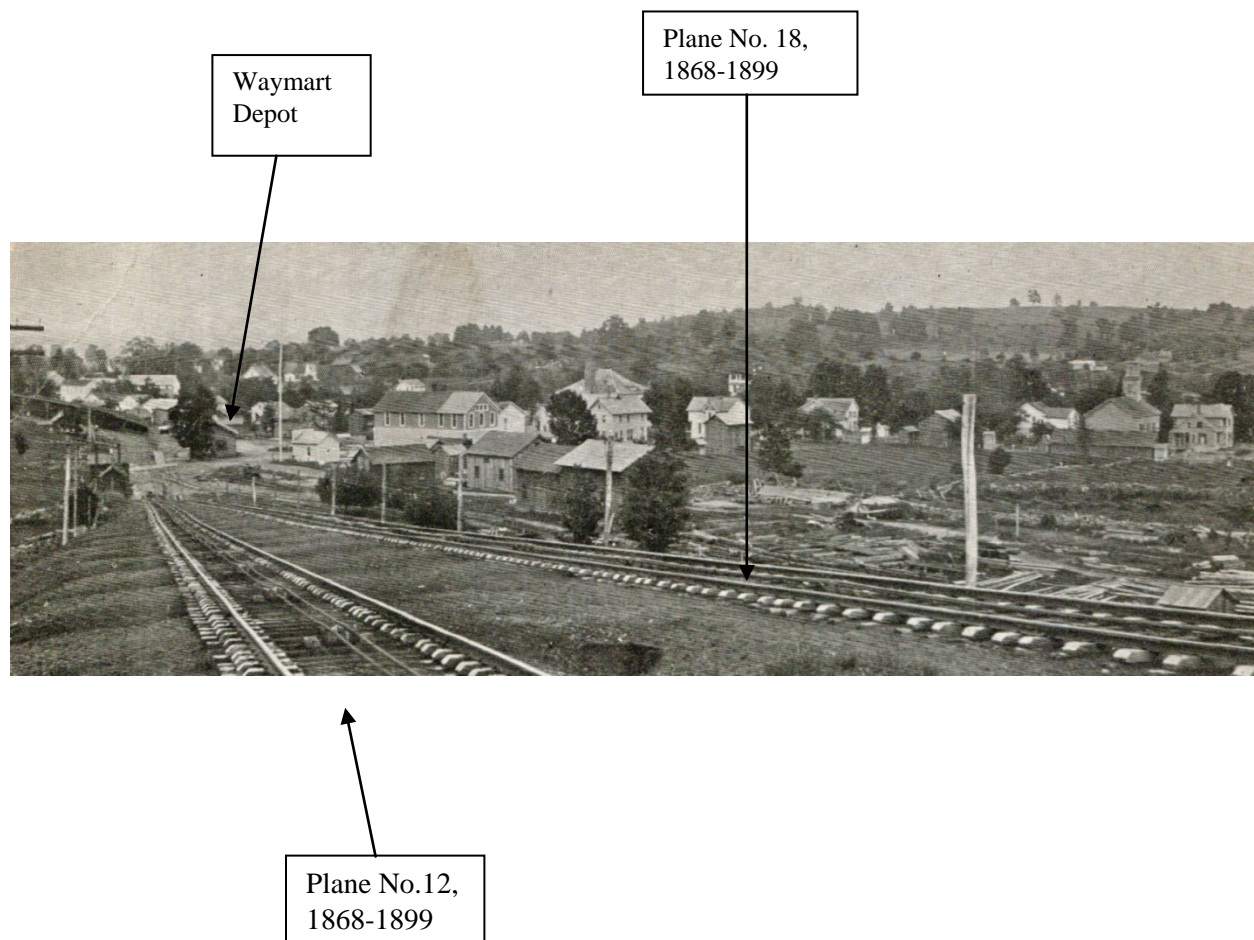
Scan of copy print in the collection of the Minisink Valley Historical Society. Yes, we are looking down Plane 18, from very near the head of the plane, as a cut of passenger cars ascends Plane 18. The plane on the left is descending plane No. 12.

A cut of passenger cars ascends Plane No. 18, 1868-1899

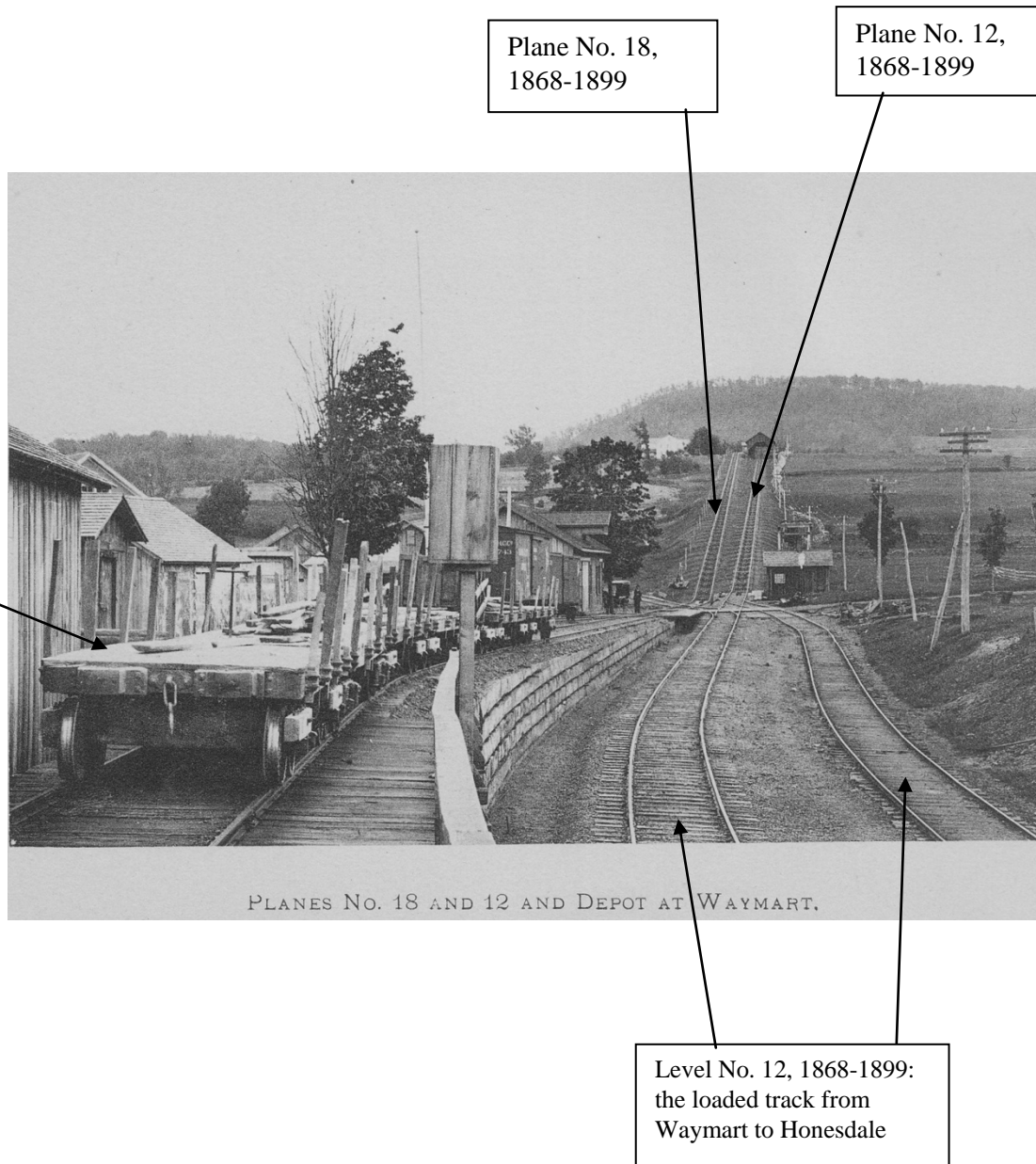
Plane No.
12 descends
into
Waymart,
1868-1899



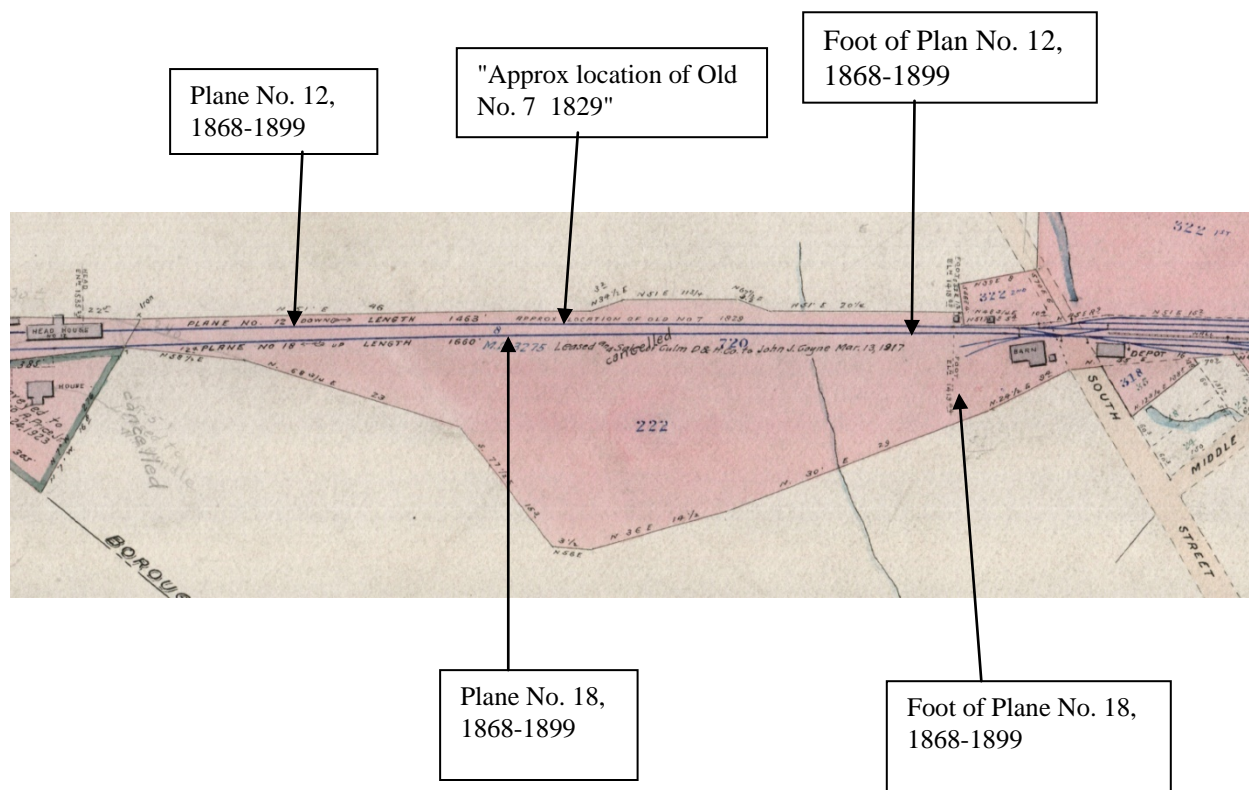
Here is a photograph of the same scene by Hensel. In this photo, we are well down the plane (not near the head as in the preceding photo). Note that the Waymart depot can be seen at the foot of Plane 18; also Level 17 coming down through Waymart to the Depot. This photo post card is in the archives of the Wayne County Historical Society.



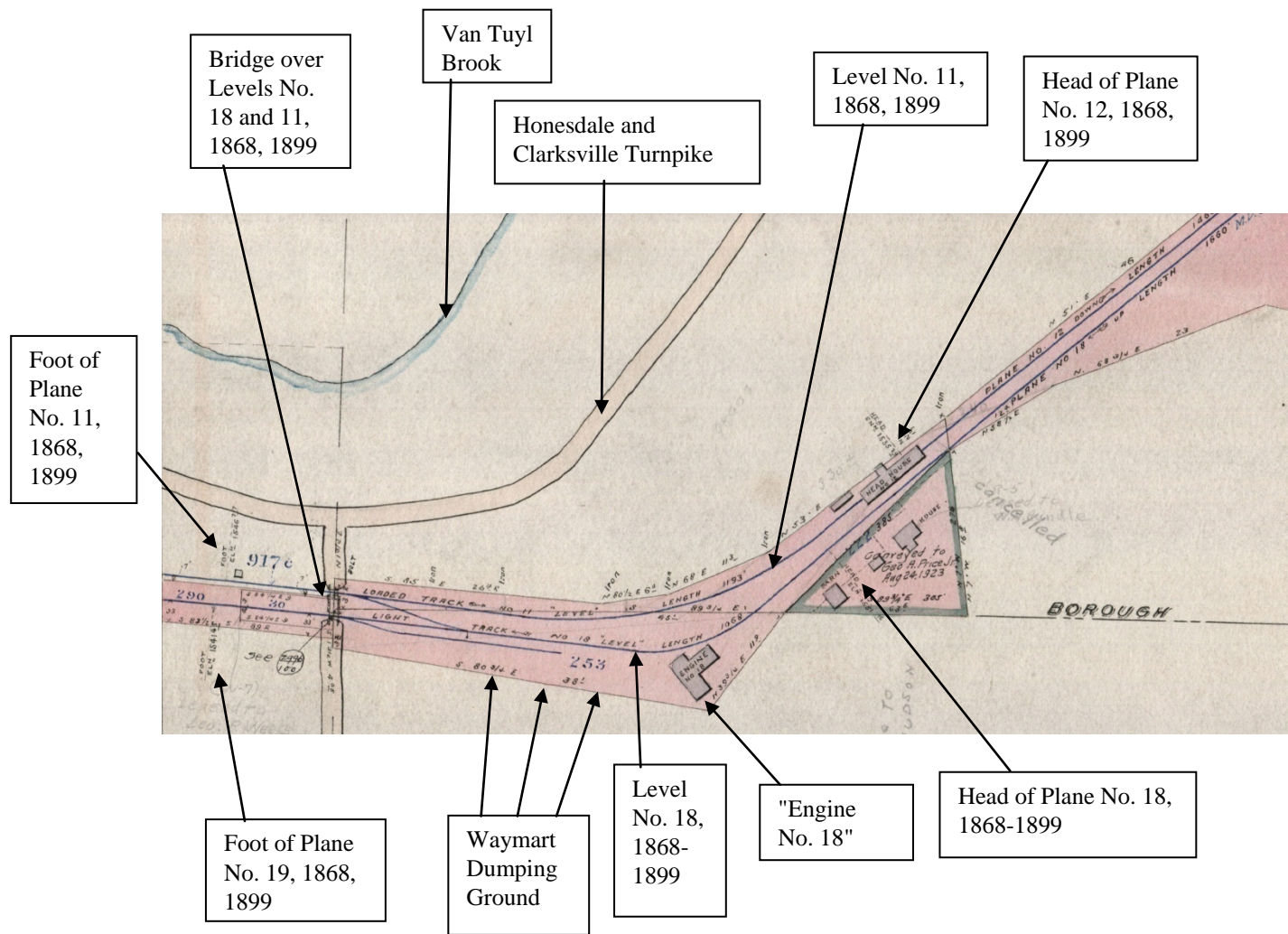
Planes 18 and 12 by Hensel:



Foot of Plane 18 from 1895 Gravity Railroad map volume:



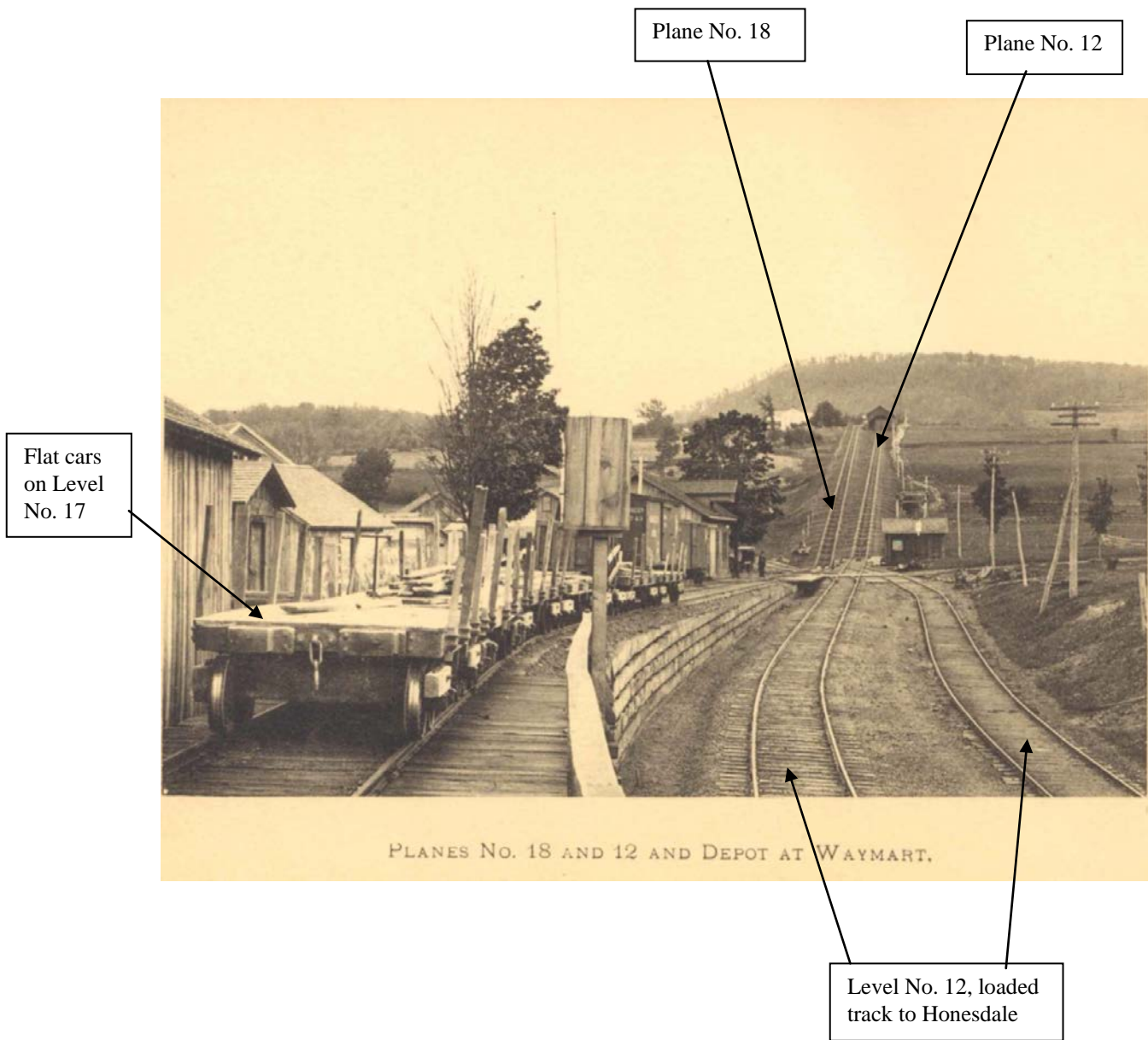
Head of Plane 18 from 1895 Gravity Railroad map volume:



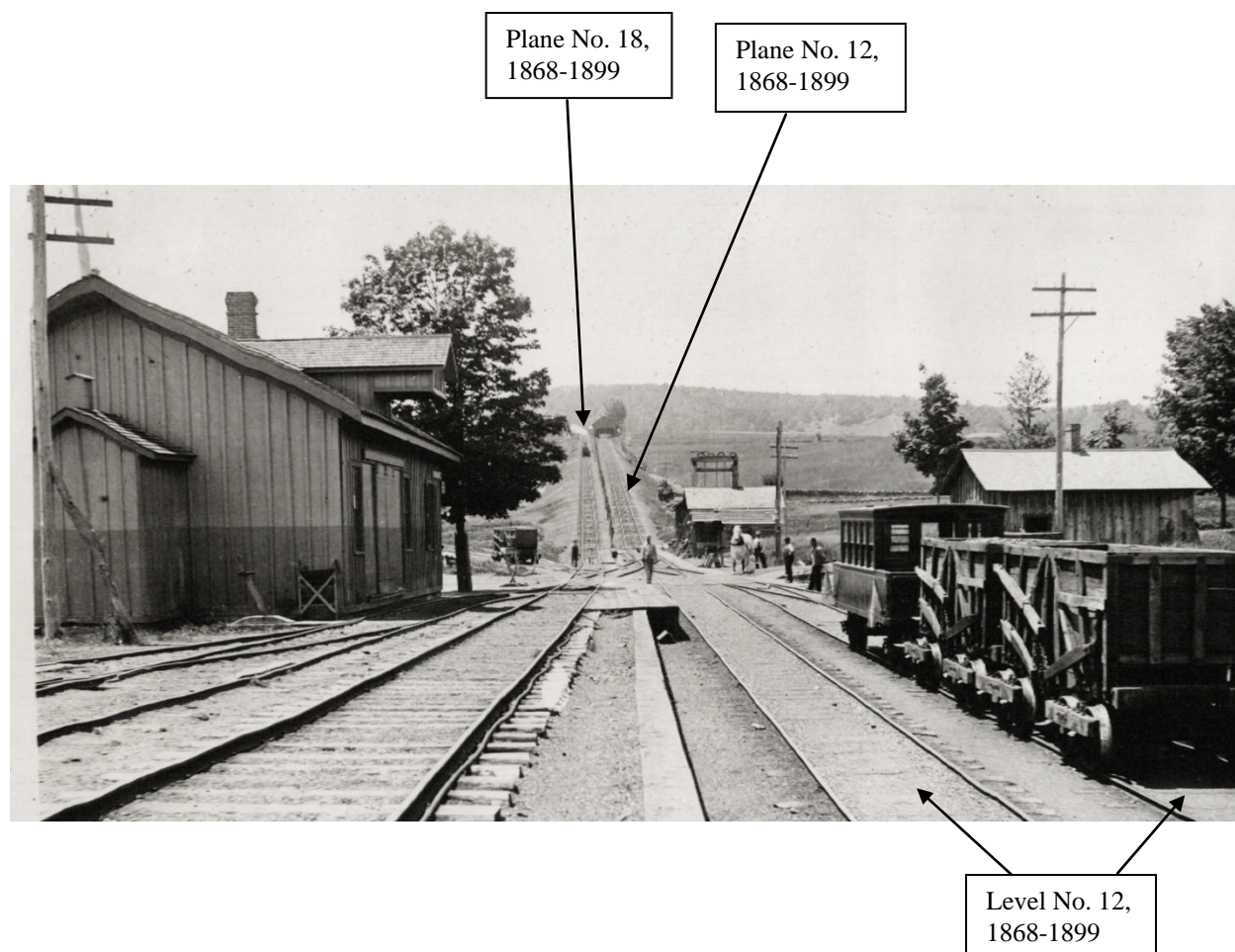
W. E. Anderson on the Planes from Farview to Waymart:

"The increasing development of the company's mines taxed the capacity of the railroad and, in 1866, the three double track planes between Farview and Waymart were replaced by four single track planes. Numbers Nine to Twelve, for lowering the loaded cars and three single track planes, Numbers Eighteen to Twenty, for raising the empties. [Work on the three new light track planes was begun in 1865 and completed in 1866, one plane being put into operation on July 17, and the others on August 2nd.] [With the independent movement of the loaded and light cars on the eastern side of the mountain, the capacity of the road was increased 200,000 tons annually.] Between 1866 and 1869 planes Four to Eight were made single track for upgrade movement only and a location for gravity movement of the returning light cars was developed from the head of Number Twenty at Farview, around Shepherd's Crook to a connection with the Blakely level. The loaded and light car movements were now entirely independent of each other and the capacity of the road was greatly increased. No further changes, except of a minor character, were made until the planes were abandoned in 1899." (Our Own 'Gravity Road', pp. 9-10, *The Delaware and Hudson Company Bulletin*, July 15, 1925)

Photograph of *Planes No. 18 and 12 and Depot at Waymart* that is included in "Souvenir of the Gravity Road / Photo-Gravures of the Old Delaware and Hudson Coal and Passenger Road, between Carbondale and Honesdale, Pa.," published by W. B. Foster, Photographer, Carbondale, Pa. In the foreground, we see, on the left, the end of Level 17, on the right, the beginning of Level 12. In the distance, we see, on the left, Plane No. 18, on the right, Plane 12.



Yet another view of Planes 12 and 18. This one in the archives of the Pike County Historical Society in Milford, wherein it is titled "Waymart Depot from the High Works."



Accidents, Facts about the Plane, Daily Life

Anson W. Bayley was fireman on Plane No. 18:

In the portrait of the man in *PABRLCP*, p. 560, we read: "ANSON W. BAYLEY, who has been a trusted employe of the Delaware & Hudson Company since 1863 and is now an engineer upon their road, with headquarters in Carbondale, was born in Clinton, Wayne County, Pa., September 1, 1847, the son of William and Eleanor (McMullen) Bayley, natives respectively of Chelsea, Mass., and Wayne County, Pa. . . / Following service in the Civil War with Company E, Seventy-ninth Pennsylvania Infantry, under Capt. George W. Hubbell, of Honesdale], Mr. Bayley began

railroading, his first work being the oiling of the cars at Waymart on the Gravity road, his second position that of brakeman and his third that of fireman on Gravity Plain [sic] No. 18. Later he was transferred to the mining department, where he remained for nine years, and afterward for three years he was fireman on a locomotive. From that position he was promoted to be engineer. He came to Carbondale in 1882 and now resides at No. 140 Salem Avenue. His marriage united him with Miss Annie Tillsly, of Waymart, and they have one child, Nettie."

William Fox in a serious accident at the foot of No. 11:

"William Fox, of No. 18, met with a very serious accident last Sunday evening. He was crossing between the loaded and light track, at the foot of 11, on a plank that reached from one track to the other over the wagon road, and when he reached the middle of the plank it broke, letting him fall into the road a distance of 12 or 14 feet. His upper teeth were nearly all knocked out and one arm sprained so badly that he has not been able to move it since." (*Carbondale Leader*, June 8, 1883, p. 3)

Boiler house at Plane No.18 reshingled:

"The boiler house at No. 18 has recently been reshingled." *Carbondale Leader*, January 18, 1884, p. 2

Gravity Employees Involved in Fraternal Organizations: Charles Ellis, a Knight Templar:

"Charles Ellis, engineer at No. 18, returned from Allentown on Wednesday, where he had been a delegate from Waymart to the grand conclave of Knights Templar." (*Carbondale Leader*, May 29, 1885, p. 1)

James Douglas, a water boy, slipped and fell from the cars and died from injuries received:

"A sad accident occurred at the foot of No. 18, Waymart, early Thursday morning, which resulted yesterday in the death of James Douglas, a boy of fifteen years of age, son of James Douglas of the above named place. James was water boy for Section Foreman Amey's gang and was on his way up the mountain to commence his day's work when from some cause he slipped and fell from the cars, receiving internal injuries, from which he died as above stated. The funeral will take place in Carbondale tomorrow." (*Carbondale Leader*, November 19, 1887, p. 4.)

Frank Spafford's long career with the D&H:

Frank L. Spafford, 12 Dickson Place, Carbondale, was born on December 8, 1845, at Seeleyville, Wayne County, the son of Lester Spafford, a farmer and sawyer. Frank retired on July 1, 1922, following 37 years and 6 months of continuous service to the D&H. "The winter that he was

twelve years old [1857], his father took him into the woods to help him in getting out mine ties and that venture marked the beginning of his career as a breadwinner. / His work in the woods stood him in good stead later in life and for several years prior to the beginning of his railroad career he was employed in lumber yards along the gravity road, from which E. M. Peck, lumber and tie agent for the mine department, procured props, ties and other lumber for use in the mines. One of these yards was just south of the main line at Prompton and was connected with it by a single track, a horse being used to haul the cars in and out. Jack Hallenbeck was the first driver and he was succeeded by Jim Miner. Both died many years ago. It was from this work that he turned to the gravity road and started his career on January 1, 1885. . . [He began his railroad career] . . . breaking in cars and watching the crossing at the foot of No. 18, on the old gravity, at Waymart, under 'Doc' Hudson, long since dead. Later, while working for 'Hi' Inch, cleaning snow from around the pulleys on No. 12, he was hit over his left eye by a trip of cars and for three days thereafter was unconscious. Often, in winter, he was obliged to board moving cars, the trucks of which, the only footing afforded, were thickly covered with ice, and was accustomed to work around moving trains as late as ten o'clock at night without the aid of a lantern because such a light would have interfered with other signals. Riding a train of more than a hundred cars in length, its force meanwhile driving a snow plow through deep drifts was not an unusual winter experience. . . From the road, some time later, he went to Carbondale where he was employed in the Orchard shop, long ago destroyed by fire, as a repairman on gravity cars. He next worked for John Dyer, the florist, caring for lawns and flower beds at stations between Carbondale and Wilkes-Barre, and then as a helper in the wood mill, at Carbondale, under Frank Shannon. At the time he retired from the service he was a member of the car repair force at shop 26, of which R. C. Schuster was the foreman." (Biographical portrait, titled "Gravity Life One Big Thrill," pp. 51-52 of the February 15, 1928 issue of *The Delaware and Hudson Company Bulletin*.)

Anson W. Bayley: fireman on Plane No 18:

In 1863, following his discharge from service in the Civil War, Anson W. Bayley began working for the Delaware & Hudson Canal Company, first oiling cars at Waymart on the Gravity Railroad. He then worked as a brakeman, and then as a fireman on Plane No. 18 at Waymart. About the man, we learn the following from *Portrait and Biographical Record of Lackawanna County Pennsylvania*, p. 560: "ANSON W. BAYLEY, who has been a trusted employe of the Delaware & Hudson Company since 1863 and is now [1897] an engineer upon their road, with headquarters in Carbondale, was born in Clinton, Wayne County, Pa., September 1, 1847, the son of William and Eleanor (McMullen) Bayley, natives respectively of Chelsea, Mass., and Wayne County, Pa. / The boyhood years of our subject passed uneventfully by and the outbreak of the Rebellion found him, a sturdy youth, filled with a spirit of patriotism that caused him to determine to enter the army, though still very young. He responded to the first call for volunteers issued by President Lincoln, and was enrolled for nine months' service with Company E,

Seventh-ninth Pennsylvania Infantry, under Capt. George W. Hubbell, of Honesdale. The regiment proceeded to Philadelphia and was detached for duty at Ft. Washington, where the youthful soldier remained, as did also his father, who was second lieutenant of the company. On the expiration of his term of service he was honorably discharged. / Returning home, Mr. Bayley began railroading, his first work being the oiling of the cars at Waymart on the Gravity road, his second position that of brakeman and his third that of fireman on Gravity Plane No. 18. Later he was transferred to the mining department, where he remained for nine years, and afterward for three years he was fireman on a locomotive. From that position he was promoted to be engineer. He came to Carbondale in 1882 and now [1897] resides at No. 140 Salem Avenue. "

6846

Plane No. 19

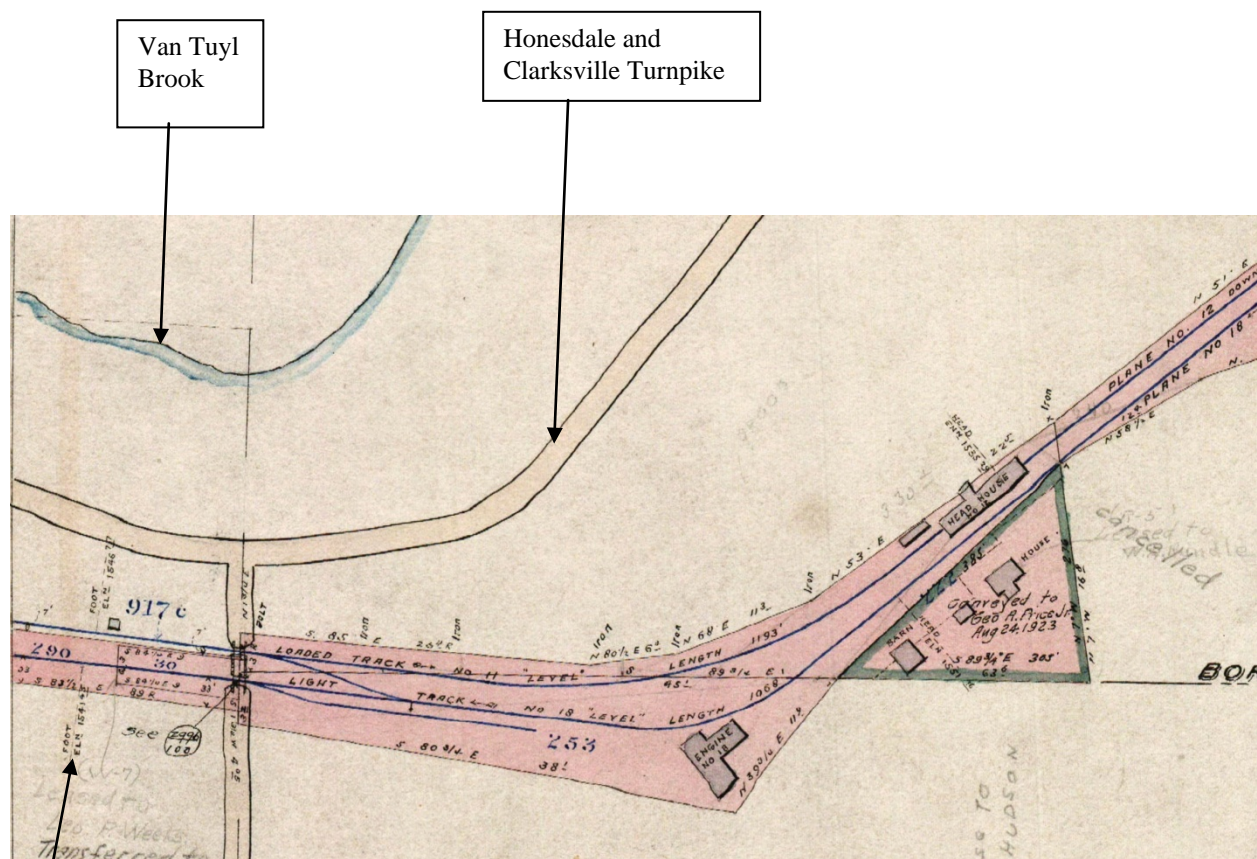
--2,630 feet long (rise 234.43 feet), the longest plane on the line
--Level 19: 295 feet long (fall 3.31 feet)

Engineer at the head of the plane:

"No. 19. Light track, Alexander McMillan, engineer." (*Joslin/Davies*)

Plane No. 19, Gravity Railroad map volume:

Foot of Plane No. 19: 1868, 1899:

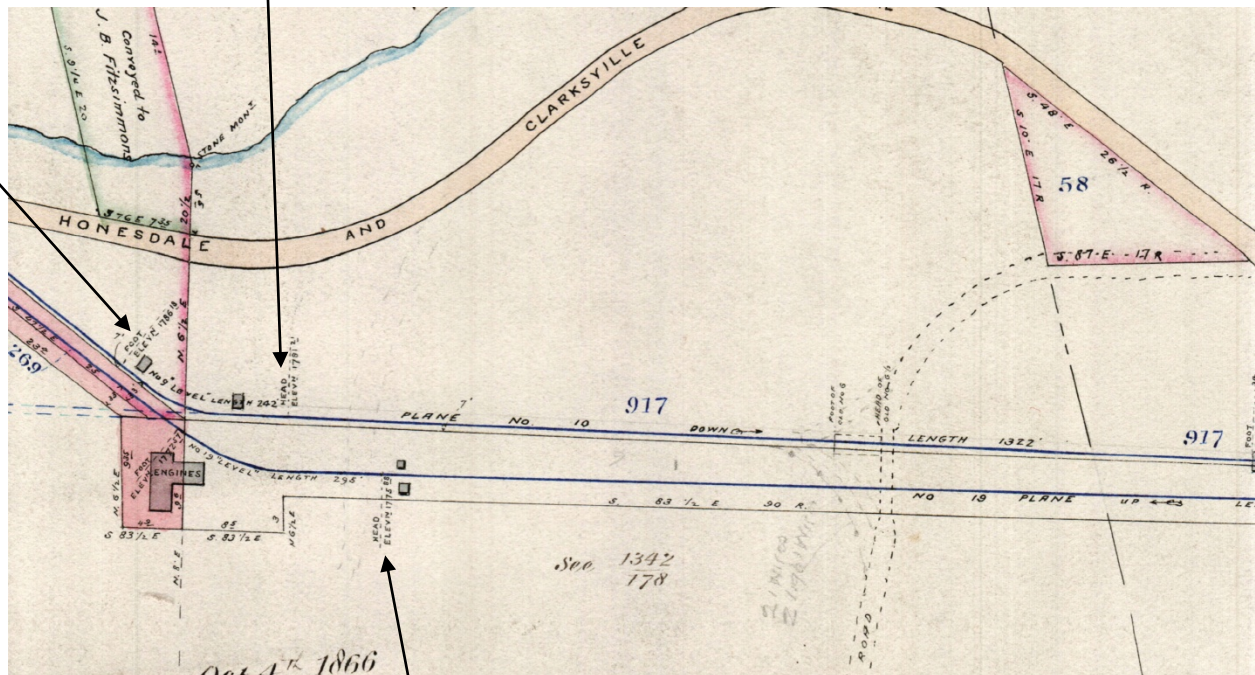


Foot of Plane
No. 19, 1868-
1899

Head of Plane No. 19: 1868, 1899:

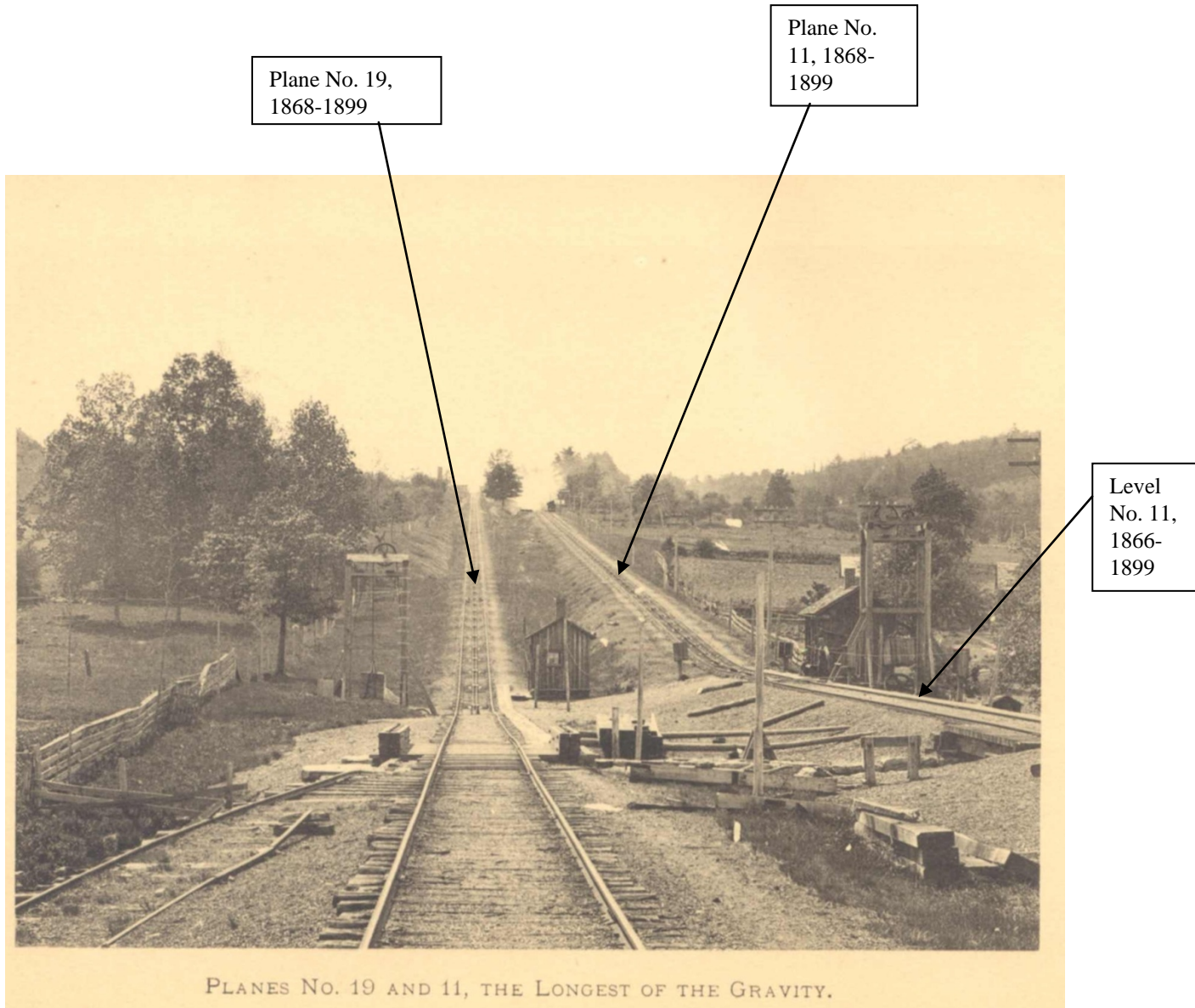
Head of Plane
No.10, 1868-
1899

Foot of
Plane
No. 9,
1868-
1899



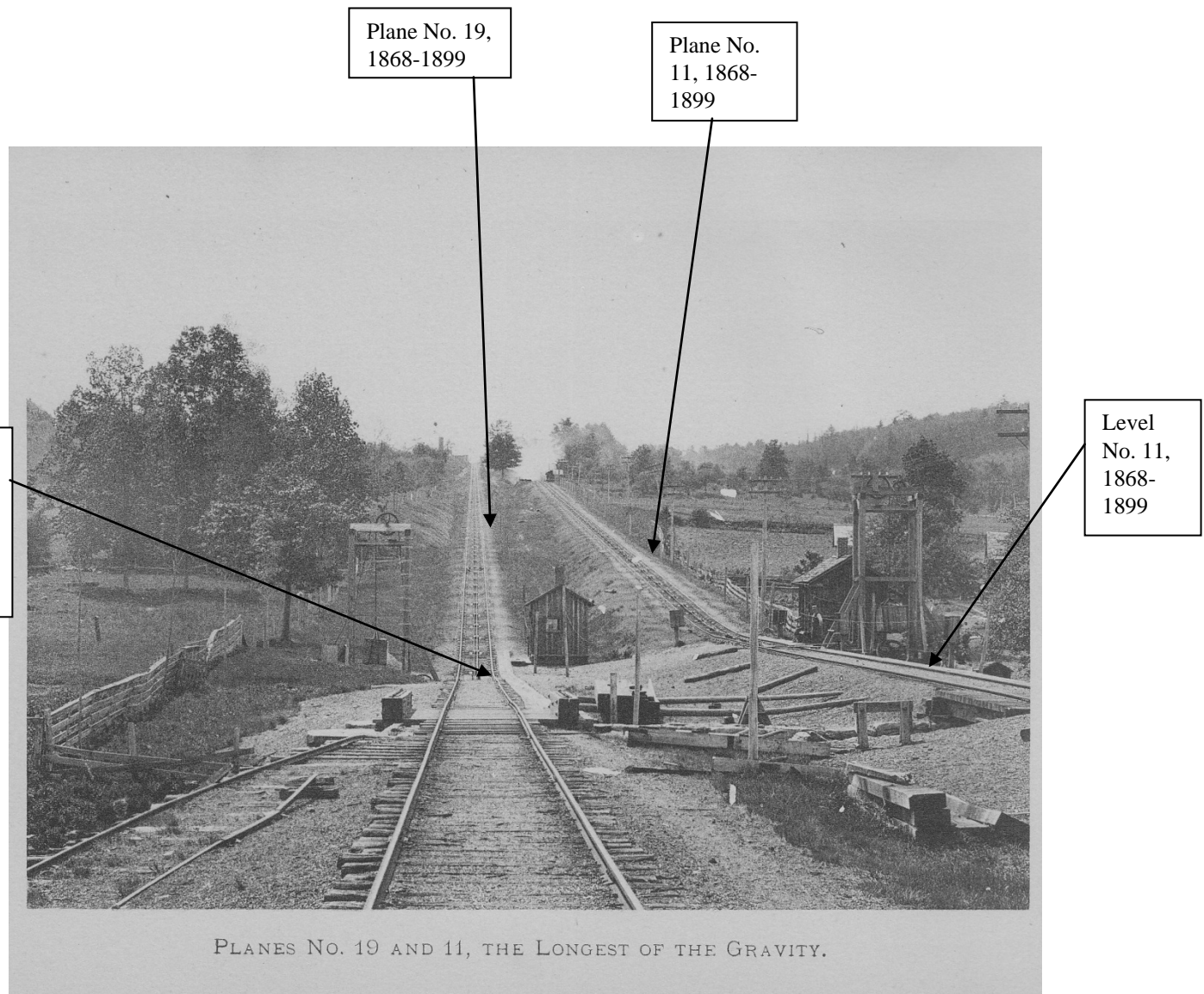
Head of Plane No. 19,
1868-1899

*Planes No. 19 and 11, D. & H. Gravity R. R. from Orig. Photo Souvenir of Del. & Hud. Gravity Road.
Published by L. Hensel, Hawley, PA. (19 on the left and 11 on the right)*



Here is the same view by Hensel:

Photograph of *Planes No. 19 and 11, the Longest of the Gravity* that is included in "Souvenir of the Gravity Road / Photo-Gravures of the Old Delaware and Hudson Coal and Passenger Road, between Carbondale and Honesdale, Pa.," published by W. B. Foster, Photographer, Carbondale, Pa.



Here is Hensel's photograph of Plane No. 19 and Plane No. 11:



Accidents, Facts about the Plane, Daily Life

George Cooper in serious accident on Plane 11 or 19:

“Fatal Accident at Waymart. / Dea. Geo. A. Cooper, for forty years past, a prominent and much respected citizen of Waymart, met with a shocking accident while at work on the second plane above the borough on Tuesday last. He was engaged in working at a pulley upon the plane, and although the rope was in motion upon the pulley, showing that the cars were moving, he did not seem to notice them. He was struck by the bumper of the loaded train on the side of the head and thrown off the track. His skull was fractured, one shoulder broken, and he was otherwise injured. He was taken up in an insensible condition, and conveyed to his home in Waymart on the afternoon passenger train for Honesdale on the Gravity road, which came along soon after. His son Charles J. Cooper, and Dr. Dusenberre of Honesdale were summoned by telegraph. The Dr. found the injuries as described above, and he remained in a comatose condition. / Although everything possible was done, there seemed to be no chance for his recovery. He lingered until about 5 o’clock on Wednesday morning, when he expired. He leaves a bereaved wife, three sons, and two daughters, who have the sympathies of the entire community in their deep affliction.” (*Carbondale Advance*, July 24, 1880, p. 3)

Three new boilers for No. 19 this week:

1883: “Three will be three new boilers put in at No. 19 this week.” (“GRAVITY NOTES,” *Carbondale Leader*, April 13, 1883, p. 3)

Alexander McMillen, the oldest man employed on the D&H road, dies of quinsy:

“Alexander McMillen, engineer at No. 19, died at his home, near Waymart, last Wednesday evening, of quinsy,--aged about 78 years. Mr. McMillen was born at Montrose, Susque. Co., in the year 1805, and there he spent his boyhood days. He came to Wayne county when the D. & H. C. Co. was in its infancy and helped to clear a place on the old summit where the gravity road was first built. After the road was finished and the coal began running over it he took the wheel at what was known as ‘middle Six,’ which position he held until the loaded track was changed to where it now is. He then took the wheel at No. 10 which he run for several years. He was then sent to No. 9 and run the wheel there until the engines were built that pulls the light cars from Waymart to the Summit. He was then promoted to the position he held up the time of his death. He was the oldest man employed on the road, and one who had been faithful to his employers under all circumstances. He was a man respected by all for honesty and uprightness in every transaction; --he always had a pleasant word for every one and will be missed by those who were employed under him, as well as by every one in this community. He had enjoyed good health the greater part of his life until about a year ago since when he had several sick spells. Trouble

seemed to come to him thick and fast for the past four months; for in that time had lost by death a son, daughter and sister. He was taken sick last Sunday and only lived three days. We would extend to the bereaved wife our heartfelt sympathy in this hour of her intense sorrow. May the one that 'doeth all things well' comfort and sustain her. The funeral will be held from the house this (Friday) afternoon at two o'clock. / WIDEAWAKE." (*Carbondale Leader*, June 15, 1883, p. 3)

Alexander McMillen's funeral, with Gravity engineers at pallbearers:

"The funeral of the late Alexander McMillen was largely attended from the house, last Friday, at 2 P.M. He was a prominent mason—the members from the lodge at Waymart turning out in a body, together with a number from the Carbondale lodge. Rev. L. Cole, of Waymart, preached an eloquent sermon. The following gentlemen, gravity engineers, also members of the order, acted as pall bearers: G. W. Sampson, P. J. Foster, E. Y. Davies, J. C. Davies, Thomas Nicols and Charles Ellis. The remains were laid to rest in the burying ground at Canaan Corners." (*Carbondale Leader*, June 22, 1883, p. 3)

Samuel Bryant new engineer at No. 19:

"Samuel Bryant is the new engineer at No. 19, and his fireman is Ben Boils." (*Carbondale Leader*, June 22, 1883, p. 3)

Broken eccentric rod delays passenger train for over an hour:

"An eccentric rod broke at No. 19 last Tuesday P.M., delaying the passenger train over an hour." (*Carbondale Leader*, January 11, 1884, p. 2)

New engines at No. 19 working fine:

"The new engines at No. 19 are working like a charm." (*Carbondale Leader*, October 10, 1884, p. 3)

Close call for Thomas Burrows at No. 19:

"Thomas Burrows, fireman at No. 19, met with a narrow escape from serious injury on Saturday last. He attempted to board a trip of loaded cars near the cold spring on the summit and in doing so his hand slipped and he was thrown to the ground and so near the rail that the wheels of the cars caught his pants' leg, but with great presence of mind he worked himself loose. He received a severe cut on his leg and is obliged to walk with a crutch. His escape from more serious injury is truly miraculous." (*Carbondale Leader*, May 19, 1885, p. 1)

Throttle valve at No.19 got open in some way:

“The throttle valve at No. 19 got open in some way last Sunday and the engine was set in motion. Before anyone could get there to shut off the steam the rope had all been run off from the drum and badly tangled in the pit and around the shaft.” (*Carbondale Leader*, May 19, 1885, p. 1)

6847

Plane No. 20

--1,565 feet long (rise 133.95 feet)

Level No. 20: 74,281 feet long (from Farview to Archbald on the light track) (fall 1020.30 feet)]

Engineers at the head of the plane:

“No. 20. F. H. Weed, engineer. Jan. 14, 1887, boilers blew up at 11 a.m. Engineer Weed was so badly hurt and scalded that he died the next day. Fireman Perry Parsons was badly hurt, but not dangerously. S. N. Bailey succeeded as engineer.” (*Joslin/Davies*)

John Pfoor became engineer on Plane No. 20 in 1878:

"JOHN PFOOR was born in Germany, coming here when a child. He married Sophia Linderman. He has been in the employ of the Delaware and Hudson Canal Company twelve years, and since 1878 has been engineer at Plane No. 20 on the gravity road." (1880, p. 464D)

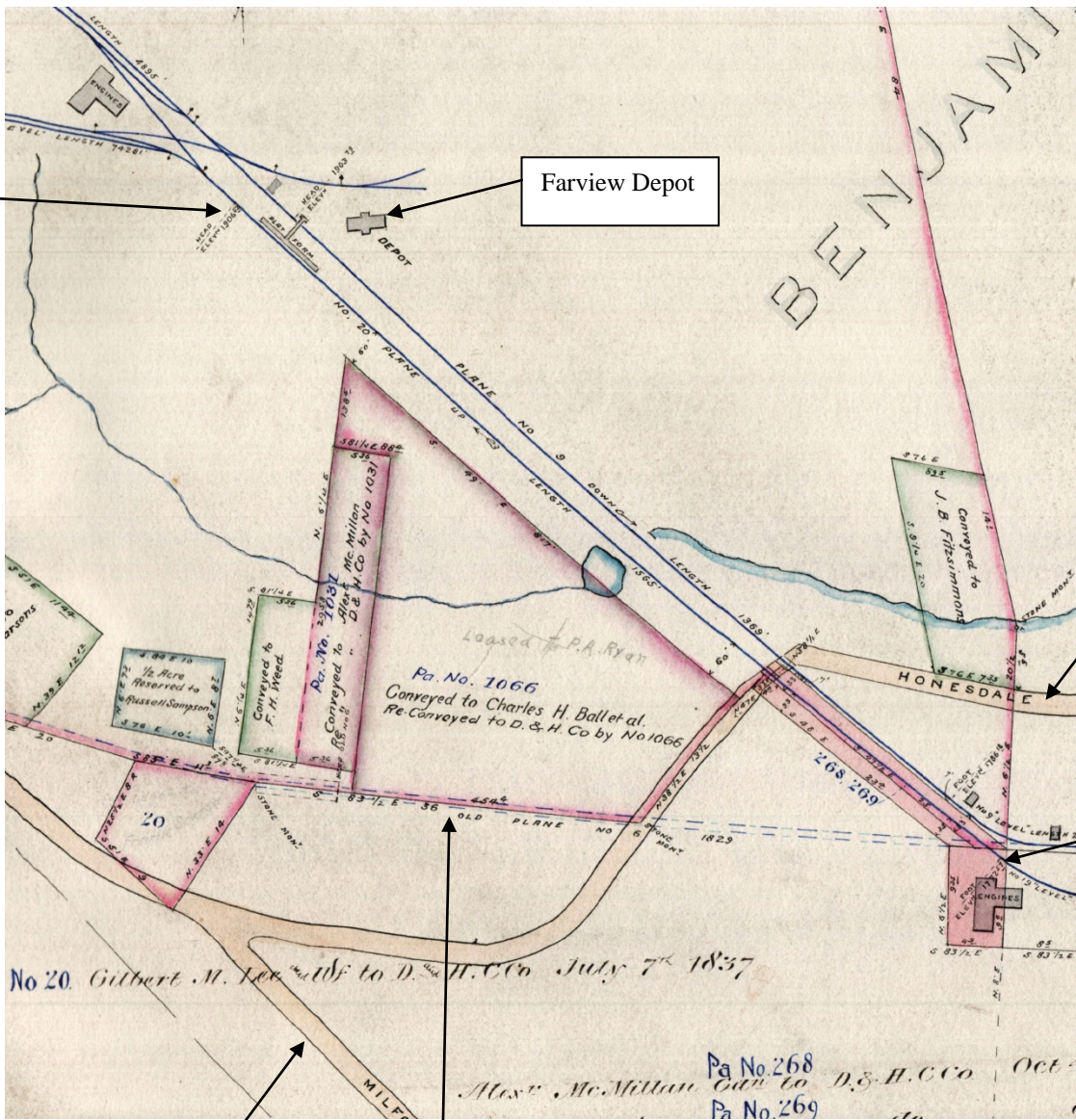
Plane 20 (all of it) in 1895 Gravity Railroad map volume:

Head of
Plane
No. 20

Farview Depot

Honesdale
and
Clarksville
Turnpike

Foot of Plane
No. 20

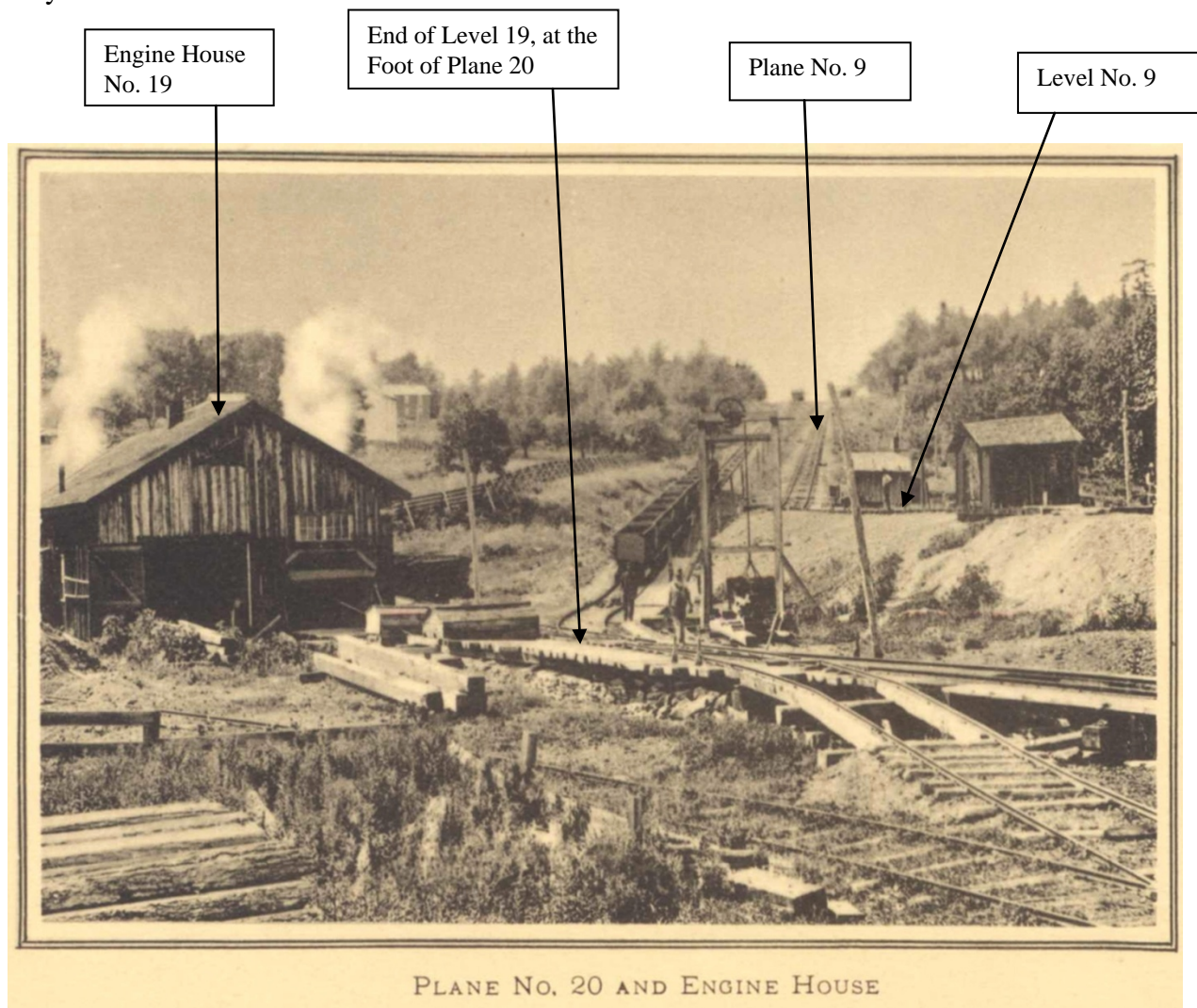


Milford and
Owego
Turnpike

"Old Plane No. 6,
1829"

Photograph of *Plane No. 20 [on the left] and [No. 19] Engine House* that is included in "Souvenir of the Gravity Road / Photo-Gravures of the Old Delaware and Hudson Coal and Passenger Road, between Carbondale and Honesdale, Pa.," published by W. B. Foster, Photographer, Carbondale, Pa.

Plane No. 19 engine house is on the left; the end of Level 19 comes in right center of photo to terminate at the foot of Plane 20, at the base of the incline on the left, up which a cut of empty coal cars is traveling up the plane to Farview; Plane 9 is coming down hill on right and ending at the second building from the right in the photo, at which point the very short Level 9 (242 feet long) begins and goes along the embankment in the upper right of the photo; just to the right of the first building on the right is the Head of Plane No. 10, which goes down the hill towards Waymart.

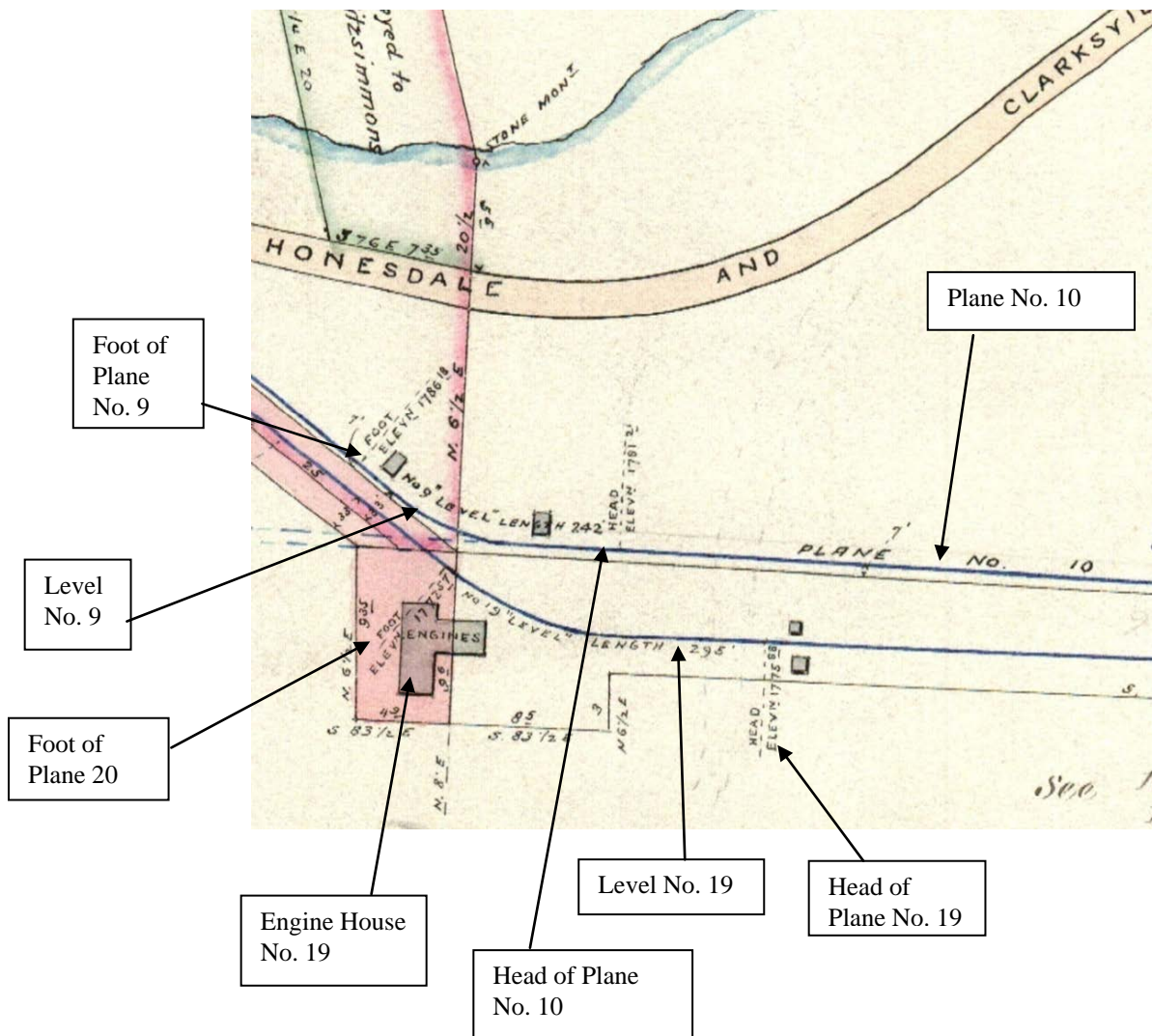


Lowenthal uses this photograph (from the National Canal Museum) on page 149, with caption on page 148. He incorrectly says “Plane No. 19, on the light track is on the left, and Plane No. 11 on the loaded track is on the right. . . Track in the foreground may be a section of the original route.” Not so. The track on the left going up the hill is Plane No. 20; Plane No. 9 comes down on the right, with Level 9 to the head of Plane No. 10 going of to the right. The engine house on the left is that of Plane No. 19; Level 19 comes in from the middle right. The two tracks in the foreground on the right are perhaps service tracks to Engine House No. 19.

Here is the same view by Hensel. Note the wonderful clarity of this Hensel image.

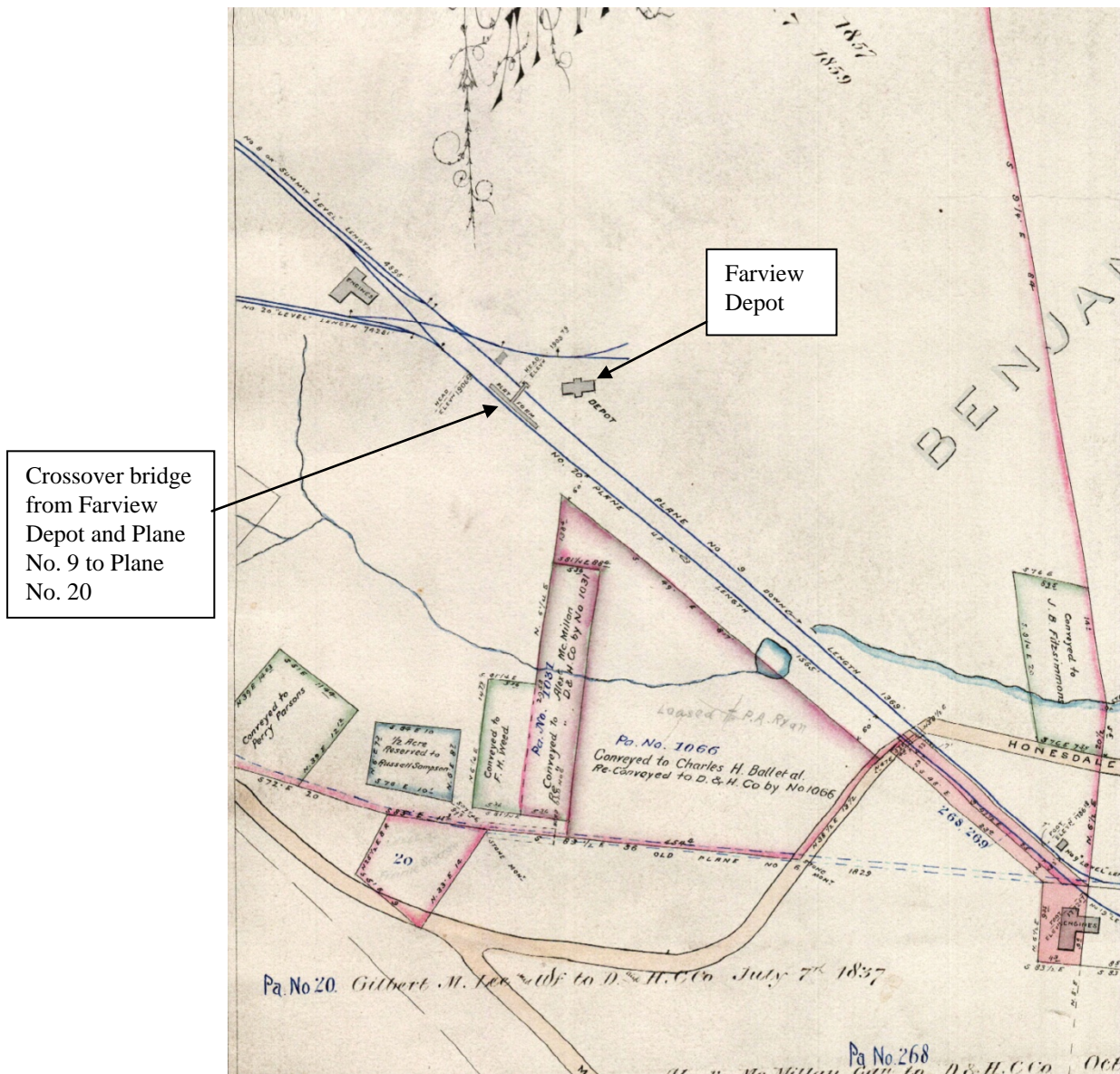


Here is view of this site from the 1895 Gravity Railroad map volume:

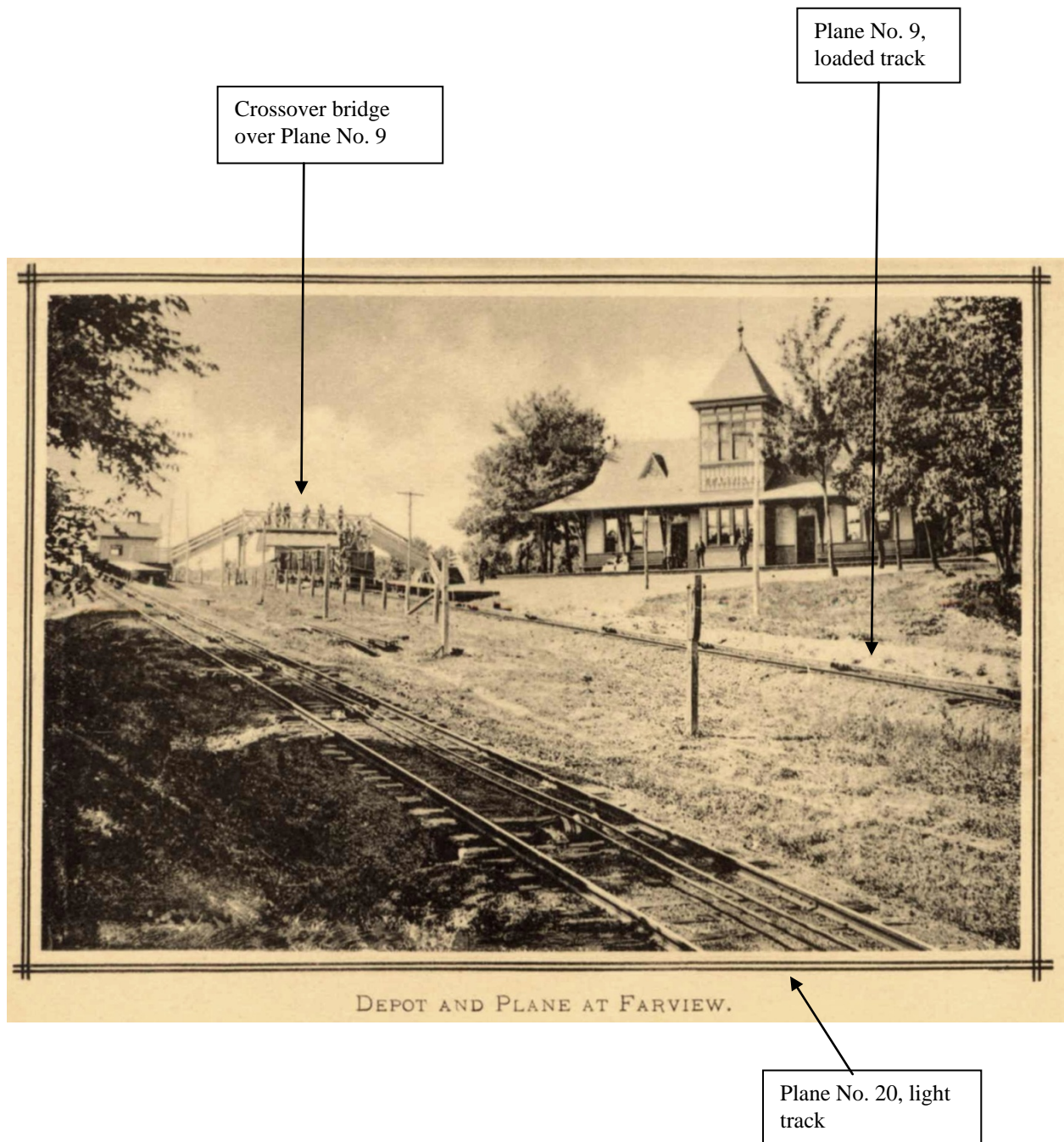


1895 Gravity Railroad map:

Farview Depot



Plane 20, on the left, and Plane No. 9, on the right, with the crossover bridge from the depot to the light track (Plane 20). This is one of the photographs by W. B. Foster in his "Souvenir of the Gravity Railroad Photo-Gravures of the Old Delaware and Hudson Coal and Passenger Road, between Carbondale and Honesdale, Pa. Published by W. B. Foster, Photographer, Carbondale, Pa."



Accidents, Facts about the Plane, Daily Life

Death of Charles H. Taylor, fireman and assistant engineer at No 20:

"**Sad Death.** / Charles H. Taylor, well known to most of our readers, who has lately resided with his family at No. 9 on the Gravity Road--near the old toll gate--died Friday, January 27th, and was buried on Sunday, Jan. 29th. His disease is variously stated to us as typhoid fever, inflammation on the lungs, and pneumonia. He was fireman and assistant engineer at No. 20, on the light track, and leaves a widow and four children. His wife was a niece of Mrs. Waterman, of this city, and the interment took place at the cemetery on the farm of Mr. Wedeman in Greenfield. He was a member of the Cambrian Lodge, I. O. O. F., of this city, and also had recently become a member, and one may truthfully say was one of the leading members of the Lodge of Knights of Honor, a short time since instituted at Waymart, in consequence of which his widow will receive the membership stipulation fee of \$2,000, which will be a most opportune and grateful allowance." (*Carbondale Advance*, February 11, 1882, p. 3)

James Cromwell killed in terrible accident near No. 8:

"About the time the LEADER was in the press, last Friday, a shocking scene took place on the light track, near No. 8. The following are the facts: Milton Shaffer left No. 20 with a three handed train, 88 cars, James Cromwell head brakeman, and A. D. Rolls middle brakeman. As the light trains leave No. 20 the brakes are all taken from their hooks and are left to drag, and in passing over the summit the head cars are bumped up, but, when they reach the grade the brakes on the rear of the train are always set which will cause a sudden jerk at the head end. [emphasis added] James Cromwell was sitting on the head end of the forward car when the surge came, and he was thrown from the car to the centre of the track, and in some way his neck was caught by the head wheel and in instant he was a lifeless corpse. As soon as the head car left the track the remaining brakemen stopped the train and went at once to where the cars were off and they found their comrade under the cars, his head nearly severed from the body. It was a sight that made the strongest tremble. The body was taken to the home of Milton Shaffer where everything was done that was possible for the mangled body. It was then taken to the home of the deceased at Canaan Corners, where Milton Shaffer and Charles Bailey prepared it for burial. This accident has cast a gloom over the community and at the home of the deceased an only sister is almost heart broken, for James was her main support, her mother having died about a year ago. The deceased was about 37 years old and unmarried. The funeral was held at the house on Sunday and was very largely attended. The conductor and brakeman of the train he was on, on the Lehigh valley previous to his coming here, were present at the funeral." (*Carbondale Leader*, May 4, 1883, p. 3)

Train dispatcher at No. 20 is working in the hay field this week:

"R. E. Weed, train dispatcher at No. 20, is up on his farm in Clinton, this week, in the hay field." (*Carbondale Leader*, July 13, 1883, p.2)

Haying now in order:

“Haying is now in order and most of the boys have some of it to do.” (*Carbondale Leader*, July 13, 1883, p.2)

Innovative pulley car now being made by F. H. Weed at No. 20:

“F. H. Weed, of No. 20, is constructing a pulley car which will, when completed, take the cake. It is made with a spur wheel attached to the head pulley and a crank on either side of the spur wheel so that a person can propel it up grade at a rapid rate of speed.” (*Carbondale Leader*, August 21, 1883, p. 2)

Patsy Price now works at No. 20 head:

“Patsy Price, formerly pulley greaser on the Waymart division, has accepted a position on No. 20 head.” (*Carbondale Leader*, March 28, 1884, p. 2)

Reliable engines at No. 20:

“The engines at No. 20 have been pulling light cars 18 years 4 months and 1 day. The same rods and shafts that pulled the first trip are in use to day. The boilers have never been repaired, the only expense has been for two wheels and one set of lagging. The engineer, F. H. Weed, has pulled but one trip over the head without shutting off the steam in time to save a snub. Mr. Weed has always been a careful engineer as the above well prove.” (*Carbondale Leader*, December 5, 1884, p. 1)

New rail to be laid on the light track between No. 20 and No. 5:

“New rail is soon to be laid on the light track between No. 20 and No. 5, for which the boys are thankful.” (*Carbondale Leader*, June 30, 1885, p. 1)

Three boilers explode at the head of Plane No. 20:

“THREE BOILERS EXPLODE. / An Explosion at Farview Yesterday Causing a Damage of Several Thousand Dollars and Resulting in an Engineer’s Death. / A terrific explosion which shook the Moosic hills for miles occurred yesterday morning at Farview when three of the six boilers at the head of plane 20 exploded, making a complete wreck of the boiler and engine houses and resulting in the death of the engineer and serious injury to the fireman. / The explosion occurred shortly before eleven o’clock. There were six boilers at this head, aggregating 300 horse power, arranged in two nests and an idea of the force of the shock can be had from the fact that one of them, weighing perhaps three tons, was thrown over five hundred feet into an open lot. [emphasis added]. At the time of the accident Hawley Weed, the engineer, was standing at his post. He was thrown backward against a wheel guard and horribly burned by the escaping steam. His face, arms and breast were scalded nearly to the bone and he was

unconscious when taken from the ruins. He was taken to his home near Waymart where he remained in a comatose state up to the time of his death at about three o'clock this morning. The fireman, Perry Parsons, was coming out of the boiler house when the explosion took place. He was struck on the head by an iron pipe and was fastened in the debris from which he was taken shortly after. His injuries are serious, but it is not thought that he will die. / The cause of the accident is not known. Mr. Manville stated yesterday that the boilers were regularly inspected and were supposed to be in perfect condition. / The ruins made a picturesque sight. For rods around lay fragments of lumber, machinery, bricks, and other materials, and of the large boiler house scarcely anything remains. One-half of the engine-house is blown off making a wreck of that, although the engines were damaged but little. / Coal traffic on the gravity is stopped and the passengers between this city and Honesdale are transferred between Farview and Waymart in sleighs. [emphasis added] Large forces are at work night and day on the spot and Master Mechanic Butler, who has charge of the repairs says that the road will probably be in running order by Monday." (*Carbondale Leader*, January 15, 1887, p. 4)

The explosion at Farview as reported by *The Journal*:

1887: "Explosion at Farview. / A few minutes after 11 o'clock on Friday morning, a frightful explosion occurred on the D. & H. Gravity railroad. / There were two nests of boilers, three in each nest, at this place. The three boilers contained in one nest exploded with terrible force, completely demolishing the boiler house and about half of the engine house. One of the boilers, weighing two or three tons, was hurled a distance of about seven or eight hundred feet. It struck near the spot where a number of children were playing, and their escape from death was a narrow one. / The engineer, Hawley Weed, was scalded in a shocking manner about the face, arms and breast by the escaping steam. He was unconscious when taken from the ruins to his home in Clinton, three miles from Waymart, and remained so until his death, which occurred about three o'clock on Saturday morning. Perry Parsons, the fireman, was knocked down just as he was leaving the boiler-house, and buried beneath the falling timbers. His injuries were not of a serious nature, and he is rapidly recovering. / The cause of the explosion remains a mystery. It is claimed that the injectors worked all right, and also that the boilers contained plenty of water at the time. The boilers were regularly inspected and although they were in use for quite a considerable length of time, were believed to be perfectly safe. / The accident caused the complete stoppage of the running of coal trains over the mountain. The passengers, however, were transferred in sleighs between Farview and Waymart. A large force of workmen was immediately set to work night and day, and the repairs were pushed forward with remarkable energy. Six new boilers replaced the old ones, and about midnight on Sunday the engine was again set in motion. Early on Monday morning the running of cars was going on as usual. S. N. Bayley, of this city, has been appointed engineer in place of Mr. Weed. / Weed, the engineer, was 48 years of age, and leaves a family consisting of a wife and six children. It is said that his life was insured in the sum of \$4,000--\$2,000 of which will be paid by the Knights of Honor, he having been a member of Waymart lodge. His funeral, which was in charge of that brotherhood, took place on Sunday." (*The Journal*, January 20, 1887, p. 3)

New boilers now installed at No. 19:

“A battery of old boilers at No. 19 has been replaced by new ones.” (*Carbondale Leader*, May 10, 1887, p. 4)

Mrs. George Miller in accident while crossing Plane No. 20:

1898: “Mrs. George Miller, of Farview, met with a very unfortunate accident this morning. She was crossing plane No. 20 and in stepping over the wire lost her footing and fell to the ground. Before she could recover a trip of coal cars was upon here and one foot was badly mangled by the wheels. She is also suffering greatly from the shock which was a severe one. Drs. Price, of Waymart, and A. and J. S. Niles, of this city, who were called, are attending the injured woman this afternoon. It is probable that amputation will be necessary. Mrs. Miller has many friends in this city who will deplore the accident.” (*Carbondale Leader*, January 5, 1898, p. 5)

6848

Level 20: Farview to Carbondale, via Shepherd’s Crook, to Bushwick Junction, to Archbald (the new light track)**Eight Planes No Longer Needed with New Light Track**

In *COP*, p. 200, we read that the new light track, 1866-68, on the west side of the Moosic Mountain eliminated the use of two ascending and eight descending planes. On this question, *Ruth* (p. 46) says: “The new light track allowed the company to abandon the second set of tracks on each of the eight double-tracked inclined planes climbing up from Carbondale to the top of the mountain, as well as the two planes above the Archbald mines.” [emphasis added] W. E. Anderson, in *The Delaware and Hudson Company Bulletin*, July 15, 1925 (see material immediately above) says that only Planes 4-8 were made single-tracked for upward movement between 1866-1869.

Commentary by the author on this question: The eight descending planes that were no longer needed by the D&H to send coal to market were the light tracks on Planes 8, 7, 6, 5, 4, 3, 2, and 1. Two of those planes, however, beginning in 1868, were used by the D&H in other ways. In 1868, the north plane on Plane No. 1 was re-purposed to become the cripple car plane, and the light plane on Plane No. 4 was now used to service the Racket Brook breaker. The light track on Planes Nos. 2 and 3 were no longer needed and were either abandoned or removed. The light tracks on Planes Nos. 5-8 were removed. Ruth is incorrect when he says that the two ascending planes that were no longer necessary were “the two planes above the Archbald mines.” Planes Nos. 26 and 27, which were installed in 1859, were still needed to ship coal north to Carbondale, and were used until the Gravity Railroad closed. The two ascending planes that were no longer needed from 1868 on were the Lower Plane and the Upper Plane on the Blakely Plane.

Preparing for Construction of New Light Track:

"The Delaware and Hudson Canal Company have so altered their railroad traversing the Moosic Mountain as to dispense, on the planes, with empty cars for drawing up loaded ones. They have further ordered surveys for a new track for empty cars from the top of the Mountain down to Carbondale, so as to make a continuous descent. The bridges on this new track have been contracted for. They are to be some feet higher than is necessary for the passage under them of coal cars. This fact, taken in connection with others, influences the belief that an experiment will be made, upon the completion of this track, to put on passenger cars, an experiment which has frequently been talked of, and which these changes will render practicable. The new work is to be prosecuted without delay.—*Honesdale Republic*."(*Carbondale Advance*, Saturday, September 1, 1866, p. 2)

The New Light Track:

"To provide for the additional tonnage expected upon the completion of the railroad about to be constructed from Green Ridge to Union Junction further alterations and improvements in the Gravity railroad were commenced in 1866. These improvements, which were of considerable extent, consisted of enlargement of the dock facilities and dumping ground, alteration of plane No. 13 at Honesdale and the construction of a new light car track from Farview down the west side of the mountain to Carbondale, a distance of six miles, on which the cars moved by gravity, eliminating the use of two ascending and eight descending planes. This work was continued through 1867 and completed in the following year, the new track being opened for the movement of light cars on April 21, 1868. For the greater part of its length this track wound in and out among the hills, along precipitous cliffs and through ravines and little valleys. Curving to the left from the light track at the foot of return plane No. 8 it ran southwesterly to No. 4 reservoir where it curved to the right and ran northerly and, crossing over the loaded track near the head of No. 5 plane, continued for some distance. Then, after a cut into the side of the mountain, an abrupt turn or loop was made on a huge embankment and the track continued in a southerly direction, recrossing the loaded track at the head of No. 2 plane [the light track crossed the loaded just above the foot of Plane No. 3], to Carbondale. This loop, known as Shepherds Crook, was about four hundred feet in diameter and two thousand feet in length, and with a grade of one hundred and ten feet to the mile the track returned at the lower end of the loop to within eighty-two feet of itself, horizontally, thirty-seven feet below its upper end. These alterations, with the exception of some minor changes, were the last made on the Gravity railroad." (*COP*, p. 201)

Error in COP: The new light track crossed the loaded track not at the head of No. 2 Plane but just above the foot of Plane No. 3.

Light Track Described in the 1890s

In an undated newspaper article titled "The Celebrated Gravity Road" (probably published in the *Carbondale Leader* in the 1890s) in the archives of the Historical Society, the author notes: "From the time the road was constructed up to 1867, light cars were hauled up the planes from Waymart to the top of the mountain by the loaded cars descending on the loaded planes. In that year [1867] Superintendent Manville made a radical change, and separated the light car planes from the loaded ones, and hoisted the light cars by independent engines at the heads of the planes. In the fall of 1868, the present light-car track from Farview to Carbondale was completed. On this piece of track is located the far-famed Shepherd's Crook, a curve having a radius of only 100 feet and thousands of passenger cars holding precious loads of human freight, together with the light coal cars, are successfully let down the mountain from Farview to Carbondale, every year, without ever a single accident."

Light track described by Whiting in Cassier article:

"In 1866 the new 'light' track planes were commenced at Waymart, under the direction of the late Mr. Manville, and the immediately succeeding years saw the building of the present 'light' track down the mountain from the summit 'level' to Carbondale. This was completed in 1869, and the double tracks on planes Nos. 1 to 8, inclusive, were then abandoned [Not so; see discussion on p. 434]. This 'light' track is one continuous down grade, about fourteen miles in length. . . This 'light' track was built to give a separate and independent track for the two kinds of cars, as were the new planes Nos. 18, 19 and 20 above mentioned. / With the old method of operating the road, considerable time was lost at the planes in waiting for cars. The loaded cars had to wait until there were empty ones to be hauled and vice versa. No tail rope was used in those days, and the cars were necessary at each end of the rope, not only to take down the descending end, but also to keep the ascending end from whipping about. . ." (p. 91)

***Joslin/Davies* on the new road:**

"In this year [1868] the new road was completed whereby the empty cars from Honesdale were run on a separate track, by gravity, and the distance for loaded cars where five planes reached the summit, were then changed, so that eight planes were now used. The empty cars were now run to the company's mines down the valley to Peckville or Olyphant. This necessitated the building of several new planes between those mines and Carbondale." (*Joslin/Davies*)

Before Level 20 was installed, the loaded and light track on the west side of the mountain were "more or less" contiguous. Now the light track (Level 20) has been completely liberated from the loaded track, and the cars rolled down the mountain by gravity.

How did the system operate?

Whiting's summary in the *Cassier* article (pp. 87-89, pp. 93-96) is excellent. That summary, which is given below, contains more detail on the planes and the operation of the planes and the engines than any other account that we have seen. Based on the information provided by Whiting in this article, one could, it seems probable, re-construct a gravity plane. Whiting, in addition, describes a ride over the entire system from Carbondale to Honesdale and return.

A biographical sketch, and photograph, are given of Whiting on page of 83 of the article: "CHARLES W. WHITING, graduated at Stevens Institute of Technology in 1884, and subsequently served as draughtsman, inspector and engineer of tests for Dr. E. D. Leavitt, the consulting engineer of the Calumet and Hecla Mining Company. For the past year Mr. Whiting has been located at Carbondale and has thus had special facilities for becoming acquainted with the railroad of which he writes."

The connection of the D&H with the Hecla and Calumet Mining Co., the company for which the consulting engineer for whom Whiting worked (Dr. E. D. Leavitt) dates to 1887, perhaps earlier, when the Calumet and Hecla Mining Company had made, at the Dickson Manufacturing Company in Scranton, the largest boiler in the world.

Largest boiler in the world made at Dickson Manufacturing Company:

"The largest boiler in the world was shipped last week from the shops of the Dickson Manufacturing Company, Scranton, to the Hecla and Calumet Mining Co., of Calumet, Michigan. It was made of steel and weighed 92,000 pounds." (*The Journal*, December 1, 1887, p. 3)

Here then is Whiting's description of the D&H Gravity Railroad and a ride over the system:

"The planes were double, that is, they had two tracks which were operated together, one for the ascending and one for the descending cars. At the head of each plane, there was a pair of iron drums or sheaves, about eight feet in diameter and of nine-inch face. They were placed tandem, like the wheels of a bicycle, and on parallel shafts, and the cable, by means of which the cars were hauled, was wound around them three times, with one end at the head of the plane and the other extending to the foot. The ascending and descending cars, being attached to the two ends of this rope, tended to balance each other and the lack of balance was controlled by the sheaves. One of the sheaves was simply an idler and served to fleet the rope along on the other sheave, so that the three turns could be taken and the increase of friction gained between the main sheave and the rope. / At the planes on the west side of the mountain, Old Nos. 1, 2, 3, 4 and 5, where the ascending cars were loaded and the descending cars were empty, the main sheave was driven by a pair of horizontal engines through a spur wheel on its shaft and a pinion on the engine shaft. At the planes on the east side, Old Nos. 6, 7 and 8, where the ascending cars were empty and the descending cars were loaded, no motive power was required and the main sheave in this case

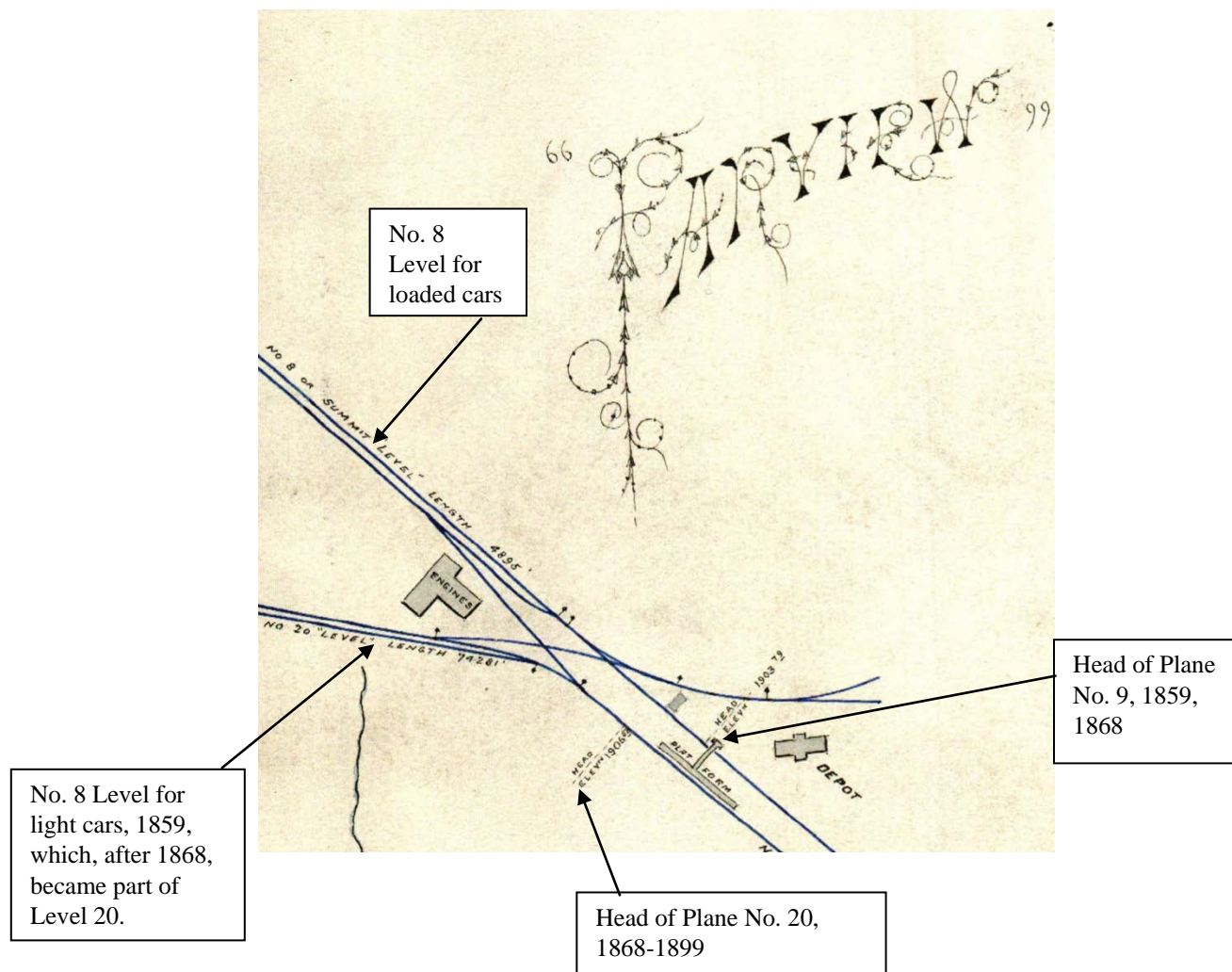
was controlled by a brake such as is now used for the same purpose. / On the west side, where the hoisting was done, there was trouble from slipping of the rope. As will be seen, the rope really had only three half-turns by which to take hold, for the other three halves were on the idler and therefore of no use. This slipping was severe in the early days of manilla [sic] ropes, especially in the winter when ice could accumulate on them, and a sort of clamp was arranged by which the rope could be taken hold of and brought to rest. This, of course, only prevented the trip from running away and did not secure the rope from slipping on the sheave. The sheaves were then altered slightly. A flange, with a groove around the outside of its circumference, was bolted to each sheave, and in this groove an endless rope was run around the two sheaves. This was made very tight and was called a 'tightening' rope. It was, however, a driving rope to drive the idler and thereby give more active friction to the hoisting rope. This device was quite successful. / There are now [1895] only two pairs of these sheaves in use on the road, although the same idea in an improved shape has been used for hoisting engines in various parts of the country up to the present day. / In the earliest days of the road, long chains were used to haul the cars, but, being awkward to handle and costly to repair, they were soon replaced by manilla ropes seven inches in circumference, overlaid with other ropes three-eighths of an inch in diameter and covered with coal tar. They were so treated to protect them against wear and weather, and yet they were taken indoors every Saturday night and brought out again on Monday morning. / On the 'levels' the grade was in favor of the loaded cars, the empty ones being drawn back by horses. From the foot of Old No. 7 the 'level' was six miles long to the head of Old No. 8. The road here was single tracked with sidings or turnouts, descending at a grade of forty-four feet to the mile, sufficient for the running of loaded cars by gravity, the empties being returned by horses. Each horse drew four coal cars and a horse car on which it rode back. From the foot of Old No. 8 to Honesdale, nearly four miles, the grade in favour of the loaded cars being but twenty-six feet to the mile, horses were used both ways, five cars in either direction being a train. It was the intention to use locomotives on this part of the road, but after a trial, the idea was abandoned. The road, however, has the distinction of having run the first locomotive in America, the 'Stourbridge Lion,' named after the town of Stourbridge, England, where it was built, and the face of a lion which adorned the front of the boiler. It was turned out in 1828 by Foster, Rastrick & Co., under the direction of the late Horatio Allen. . **[Whiting then describes what he sees as he rides over the mountain and to Honesdale. Here is that wonderful description.]** "Leaving the station at Carbondale, the start is very gradual as we crawl away towards the foot of No. 1 plane. At this point there is a man waiting for us and for the coal cars as they come along. It is his duty to signal to the head of the plane, where the hoisting engines are, and to attach the trains or trips to one of the two ropes which run up the plane between the rails. As we come to rest, he gives the signal by pulling on a bell wire which leads up the plane to the engine house, and then makes us fast to the rope. This he does with a sling, a piece of chain five feet long with a hook on each end. One hook engages with a link in the forward end of the car and the other with one of several links in the wire rope as it comes along. Of the two ropes mentioned, one is the hoisting rope and the other is a tail rope. The hoisting rope extends from the links where we take hold and to which it is secured by a rope socket, up the plane to the drum of the hoisting engine. Here the end is made fast by passing it through a hole in one end of the drum and lashing it to the drum shaft. At the other end of the drum, is another hoisting rope, secured in the same way. This rope, however, is wound up on the

drum, all but enough of it to run to the 'knuckle,' where it is also fastened to a set of links. From these links, then, is the tail rope running down the plane to the foot, where it goes under ground around a tightening sheave and back to the links where we are. / The hoisting ropes are kept in good condition, and when they show signs of wear by the breaking of the individual wire strands, they are taken off the hoisting service and used as tail ropes. These tail ropes answer two purposes. They bring down to the foot of the plane the empty end of the hoisting rope, and also balance the hoisting rope, so that, as far as the ropes are concerned, the load on the engines is uniform and consists only of the friction of the ropes on the planes. The ropes are one and a quarter inches in diameter and are made of iron. They rest on cast-iron carrying sheaves, ten inches in diameter, and about twenty or thirty feet apart along the plane. / By now we are moving, and, as the car assumes the inclination of the plane, we find it more comfortable to lounge back in our seats. The angle is not unpleasant, being only one in twelve from the horizontal. We are hoisted up the plane at a speed of about twenty miles an hour. The coal is handled in the same manner, five cars of five tons capacity each making a 'trip.' Of these cars one has a brake for controlling it and its companions as they run down the grade on the 'levels' and on the 'light' track on the west side of the mountain. / As we pass the 'knuckle,' that is the head of the plane, a brakeman, who is on our car, unhooks the sling, while we and the rope are still in motion, and we run along by the force of inertia and gravity. We have come up one hundred and nineteen feet, and traveled fourteen hundred and seventy-nine feet horizontally, and are now running along a 'level,' having a grade of about fifty feet to the mile, to the foot of No. 2 plane, a distance of sixteen hundred and forty-eight feet. Arrived there, we find another man awaiting us and we are hoisted up No. 2 plane in a similar manner. / Passing the 'knuckle,' we run along as before on a short 'level' to the foot of No. 3 plane. We keep on climbing in this manner until we have reached the head of No. 8 plane, which is the summit of the system and the top of Moosic Mountain. From the foot of No. 1 plane we have come up seven hundred and fifty feet and have traveled a little more than two miles horizontally. / Before going further, let us look into the engine house at the head of this plane and see what sort of machinery has been helping us up the mountain side at such a lively rate. We will find there the same kind and amount, almost exactly, as would be seen at any of the other places that have been passed. There is a pair of 18 x 36-inch horizontal engines, with their cranks at 90 degrees apart on a common shaft. Their valves are ordinary side valves, each driven by a pair of eccentrics through a link for reversing. On the crank shaft is keyed a pinion which drives a spur wheel keyed to the drum shaft, the reduction being about six to one. The drums are ten feet in diameter and from six to nine feet long, varying with the length of the plane. The boilers are thirty-four inches in diameter and fifty-feet long, externally fired, with return tubes. / Taking our car again we run along by gravity, under the control of a hand brake, until we reach Farview, the first regular station. From Farview we are lowered down planes Nos. 9, 10, 11 and 12, reaching Waymart a drop from Farview of about five hundred feet. As these planes are only for lowering the trips, they are, of course, not fitted with hoisting engines, but with the brakes previously mentioned. These consist, in the first place, of a drum about ten feet in diameter, upon which the ropes wind and unwind. At one end of the drum is a spur wheel, slightly larger in diameter, which gears with and drives a pinion, about two feet in diameter, keyed to a shaft. This shaft carries a fan and a brake wheel. The fan is twelve feet in diameter and has eight blades. It serves as a drag to the motion of the drum. The brake wheel is encircled by a wrought-iron band, made fast to some part of the frame,

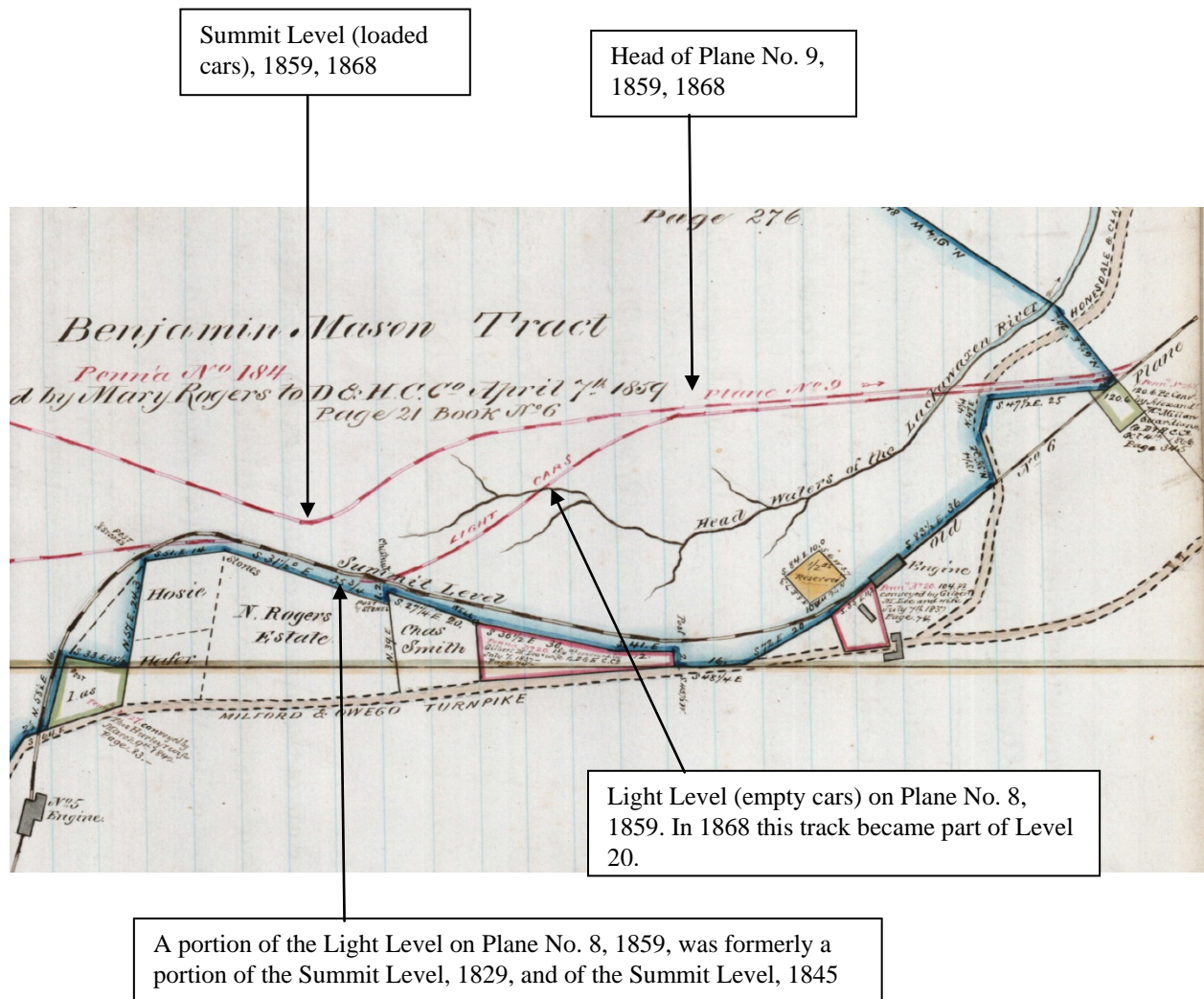
but so arranged that it can be tightened about the brake wheel by means of a lever. The latter is controlled by the brakeman in the head house. / From Waymart to Honesdale, a distance of ten miles, there is one continuous down grade of about forty-four feet to the mile, and the ride over this is most enjoyable. Returning, Plane No.13 takes us up and out of the town [of Honesdale] immediately. This is the steepest of all the planes, rising about two hundred feet. Then comes one of the pleasantest runs on the road, the 'level' from No. 13 to No. 14, something less than three miles long. [emphasis added] On the return trip we are hoisted up planes Nos. 14 to 20 inclusive, and run along the intervening 'levels' before we reach the summit of the mountain. From Farview to Carbondale we run over the 'light' track before spoken of, a continuous down grade of fourteen miles. / The trip is a pleasant and instructive one, and our thanks are due to Superintendent C. R. Manville and N. L. Moon, his assistant, as well as to other employes of the road, for their kind attention and assistance."

Level 20: From the head of Plane 20, Level 20 follows the path of what was formerly No. 8 return track for light cars. At the foot of return plane No. 8, it ran southwesterly to No. 4 reservoir where it curved to the right and ran northerly and, crossing over the loaded track near the head of No. 5 plane, continued for some distance. Then, after a cut into the side of the mountain, an abrupt turn or loop was made on a huge embankment and the track continued in a southerly direction, recrossing the loaded track just above the foot of Plane No. 3, to Carbondale.

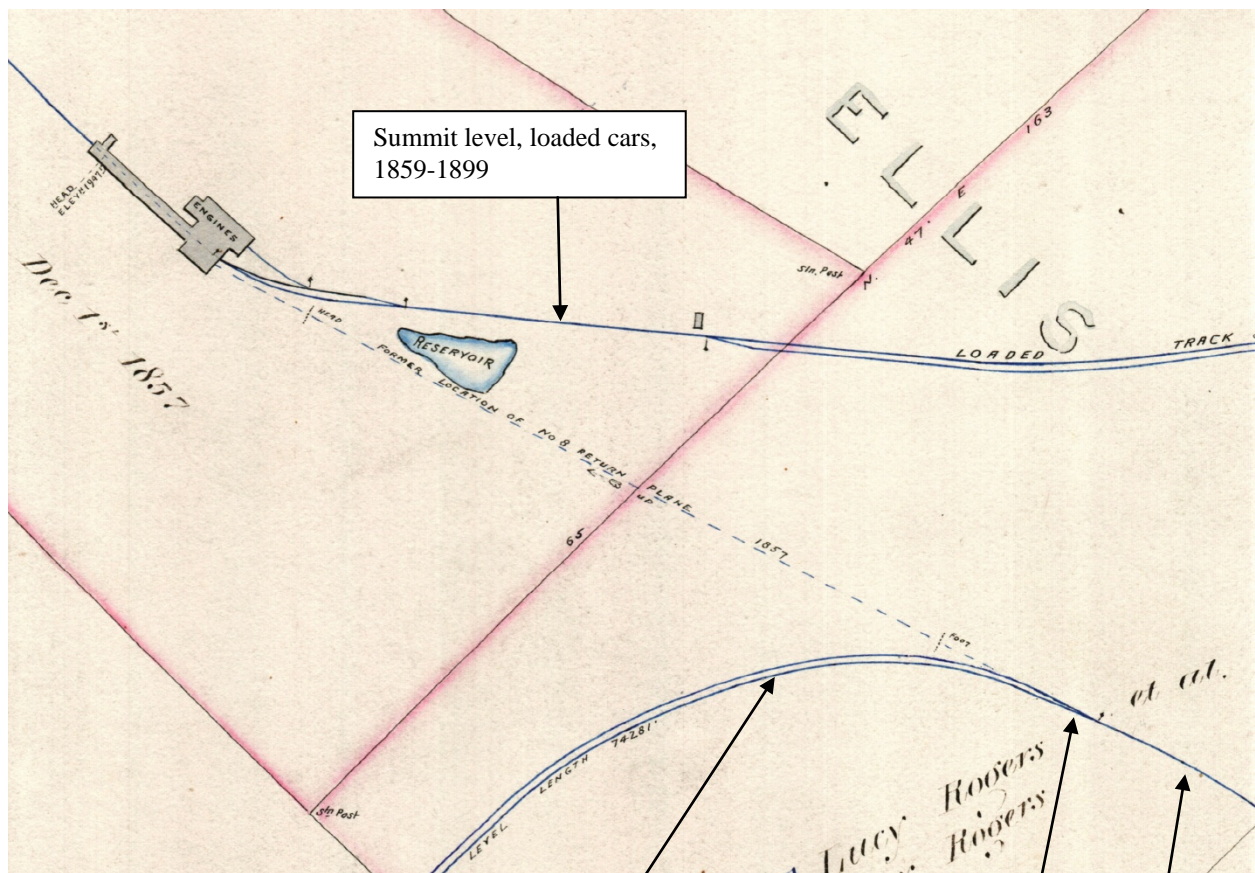
On the map detail given below, the portion of "No 20 Level" shown here was, in the 1859 configuration, the beginning of No. 8 level for light cars. In 1868, this became the beginning of Level 20.



In the *D. & H. Deed Book – Wayne*, on page 280, there is a map that illustrates the deed, pp. 276-79, dated March 31, 1857, between Lucy Rogers and the Delaware & Hudson Canal Company. On that map, in the view given below, we see both the loaded and light levels on Plane No. 8 as well as the head of Plane No. 9. The track for light cars in this section is shown on the map detail given below.



In the detail from the 1895 Gravity Railroad map volume shown below, we see both the Summit Level (loaded cars) and No. 8 Return Track (light cars). The return track, remember, is headed downgrade in the direction of the head of Plane No. 8. The light cars (Level 20) continued on what was formerly No. 8 Return Plane almost to the point where the cars ceased to have gravity-induced forward momentum. At that point, Level 20 branched off to the left, downgrade.



Summit level, loaded cars,
1859-1899

Level 20, now on entirely new
road bed, begins its descent of the
mountain, to Carbondale and to
Archbald.

Gravity-induced forward
momentum, just about at an
end, a new track, Level 20, cut
off to the left downgrade.

No. 8 return plane,
for light cars, 1859

[illegible]

Level No. 20 ran southwesterly to No. 4 reservoir where it curved to the right and ran northerly and, crossing over the loaded track near the head of No. 5 plane, continued for some distance. Then, after a cut into the side of the mountain, an abrupt turn or loop was made on a huge embankment and the track continued in a southerly direction, recrossing the loaded track just above the foot of Plane No. 3, to Carbondale.

Here are two map views of Level 20 in the Number 7 Pond and Number 4 area. These views are on the map that illustrates the release, dated August 11, 1856, between Henry Edgett / Horatio N. Edgett and The Delaware and Hudson Canal Company. That release is given on page 274 of D&H Deeds PA; the map on page 275.

In the first of these two views, Level 20, the Light Track, is in red ink. We see it here descending toward No. 4 Reservoir and then passing between No. 4 and No. 7 Reservoirs, and then following the western edge of No. 4 Reservoir. A portion of the 1843 roadbed is shown in blue ink.

Original path of Milford and
Owego Turnpike

Level 20 descends towards No. 4
Reservoir

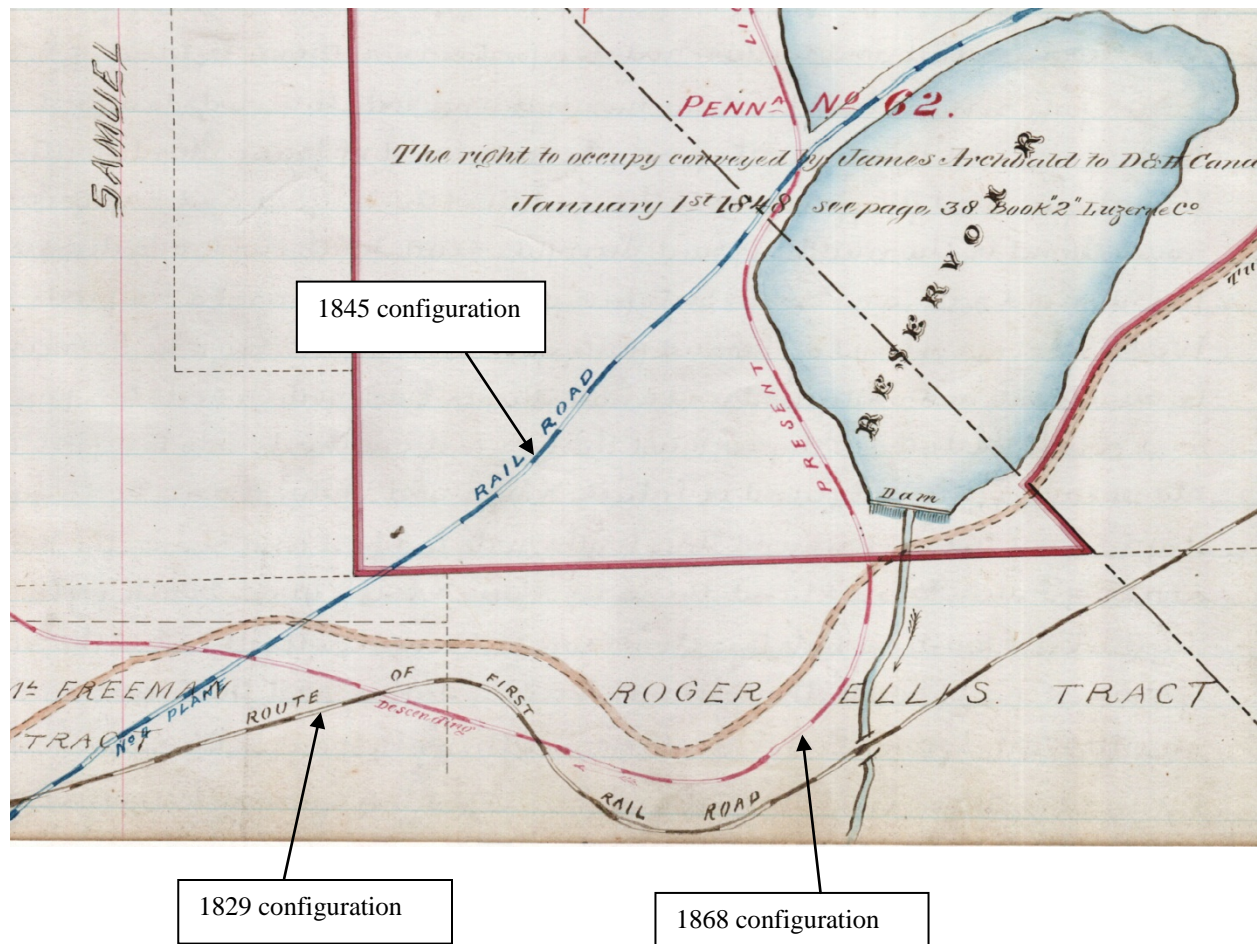
The Milford
& Owego
Turnpike
passed
under Plane
No. 6 (1859,
1868) in its
journey to
the west.

Present-day
Route 6



Level No. 20 passes along the Western
edge of No. 4 Reservoir.

In the second of these map views that illustrate the release, dated August 11, 1856, between Henry Edgett / Horatio N. Edgett and The Delaware and Hudson Canal Company, we see portions of the 1829 configuration (black ink), the 1845 configuration (blue ink), and the 1868 configuration (red ink).



Here are eight views of the light track as it descends the mountain. These photos were taken by the author on September 4, 2013, as he and Ed Hodorawis walked the roadbed of the light track from behind Gibney's Restaurant to the point where the light track passes between No. 7 Reservoir and No. 4 Reservoir.









Just beyond the utility pole shown here, the light track curves to the left, down grade.



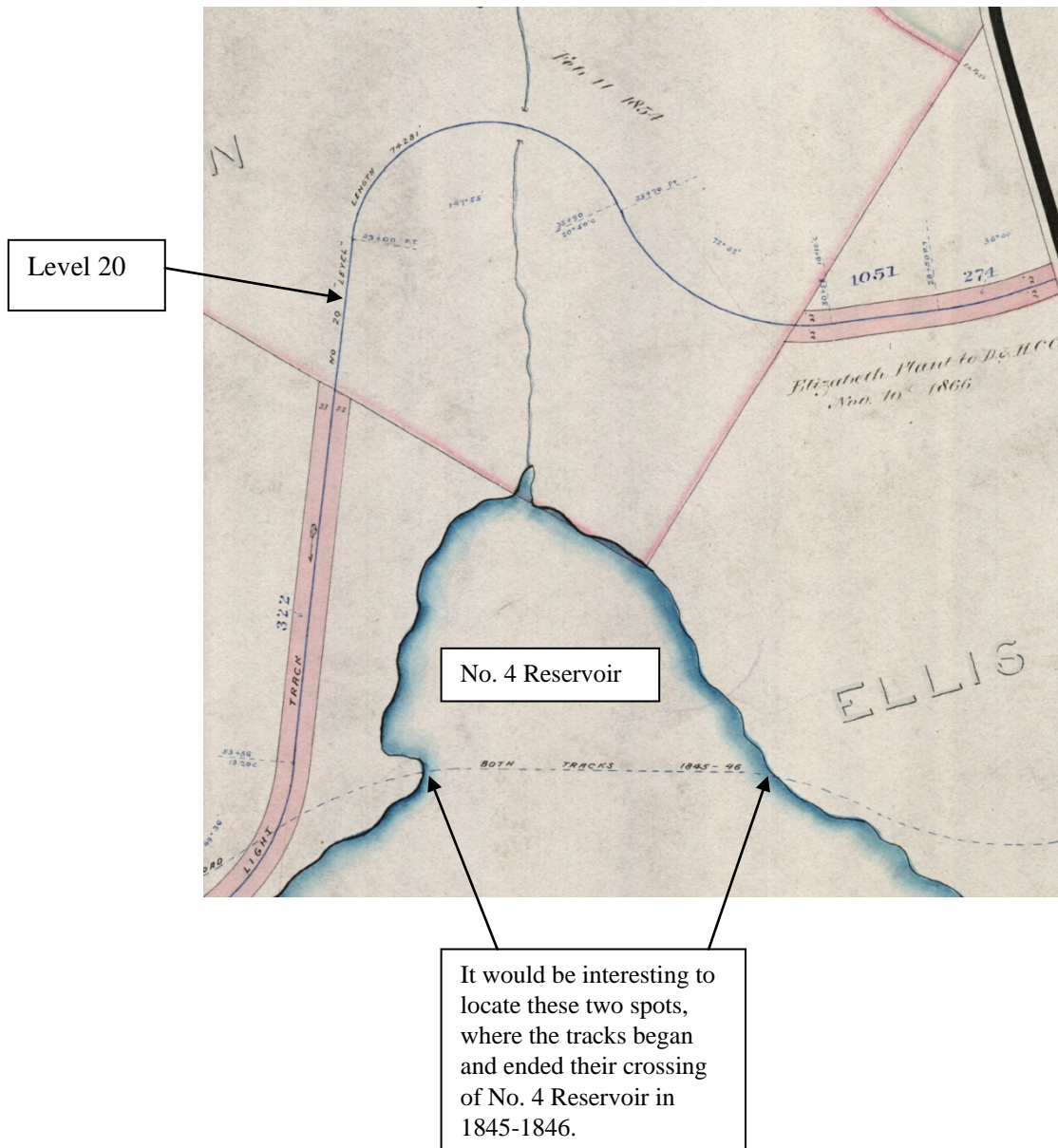
The light track curves down grade to the left before the utility pole shown here.



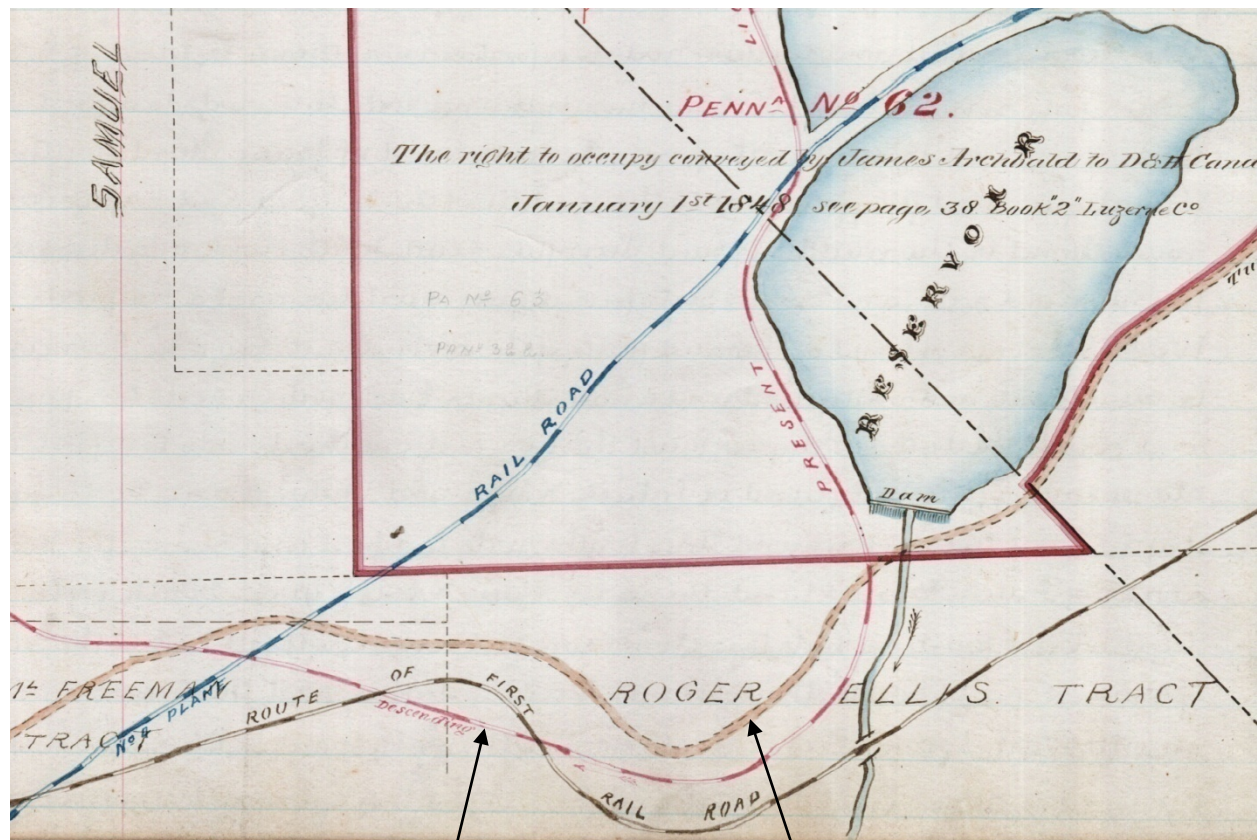




The section of Level 20 between No. 4 and No. 7 Reservoirs is shown on the enlarged detail given below from the 1895 Gravity Railroad map volume:



Level 20 descends past the outlet to No. 4 Reservoir:

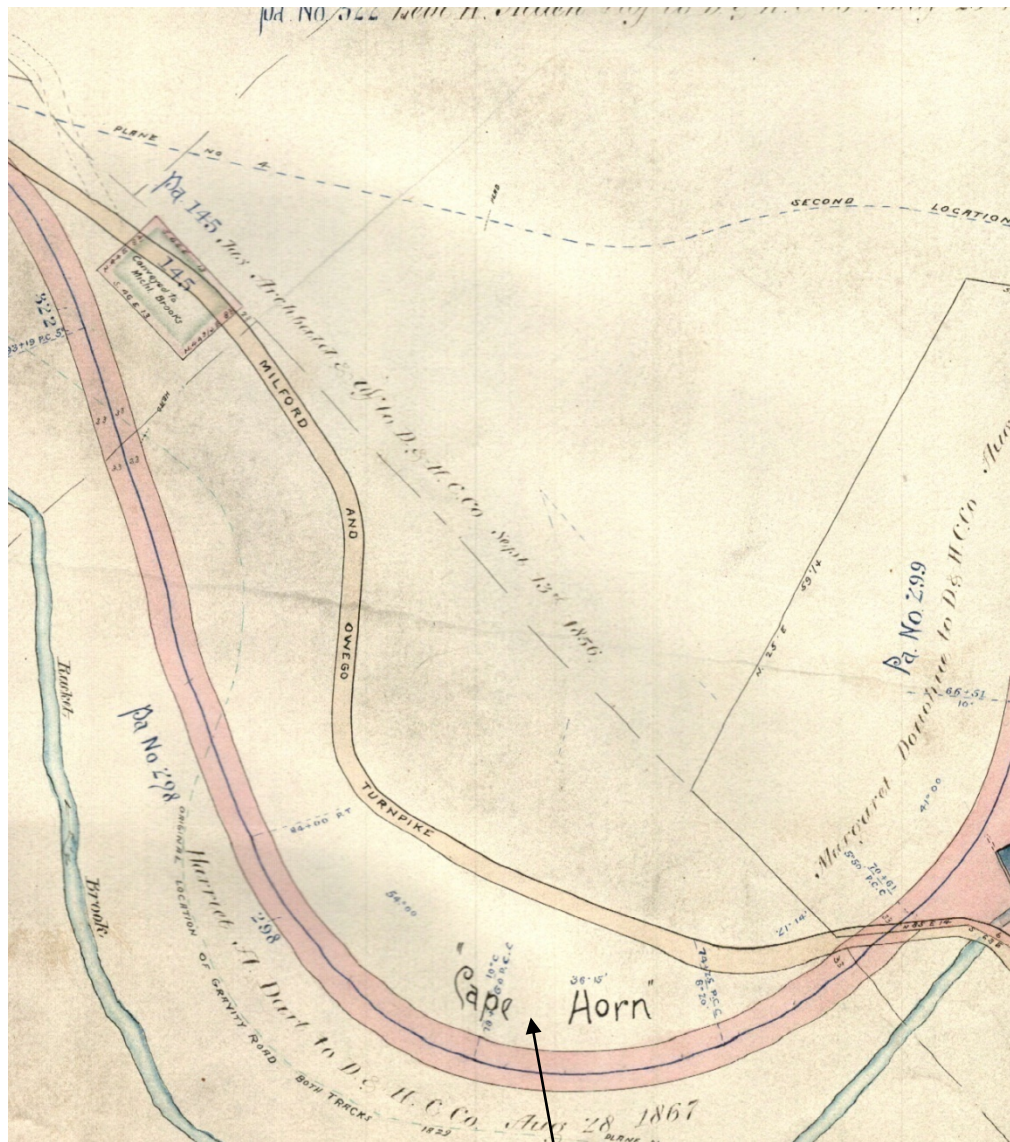


The new light track,
Level 20, descends the
mountain.

Present-day Route 6

The broadly curved section of the light track (Level 20) just below No. 4 Reservoir was known as "Cape Horn" by Gravity men at the time.

Cape Horn section of Level 20:



Cape Horn, on Level 20
below No. 4 Reservoir

At this point, Level No. 20 then ran northerly and, crossing over the loaded track near the head of No. 5 plane, continued for some distance. Then, after a cut into the side of the mountain, an abrupt turn or loop was made on a huge embankment and the track continued in a southerly direction, recrossing the loaded track just above the foot of Plane No. 3, to Carbondale.

Here are some views of the light track, taken by the author, between the point where the light track crossed the loaded track (near the head of Plane No. 5) and Shepherd's Crook. These photographs were taken during a walk on the light track (Level 20) with Ed Hodorawis (Waymart), on December 14, 2012, between the intersection of the loaded and light tracks at the head of Plane No. 5 and Shepherd's Crook. In the view given below, the light track descends towards Shepherd's Crook:



Level No. 20 descends towards Shepherd's Crook:



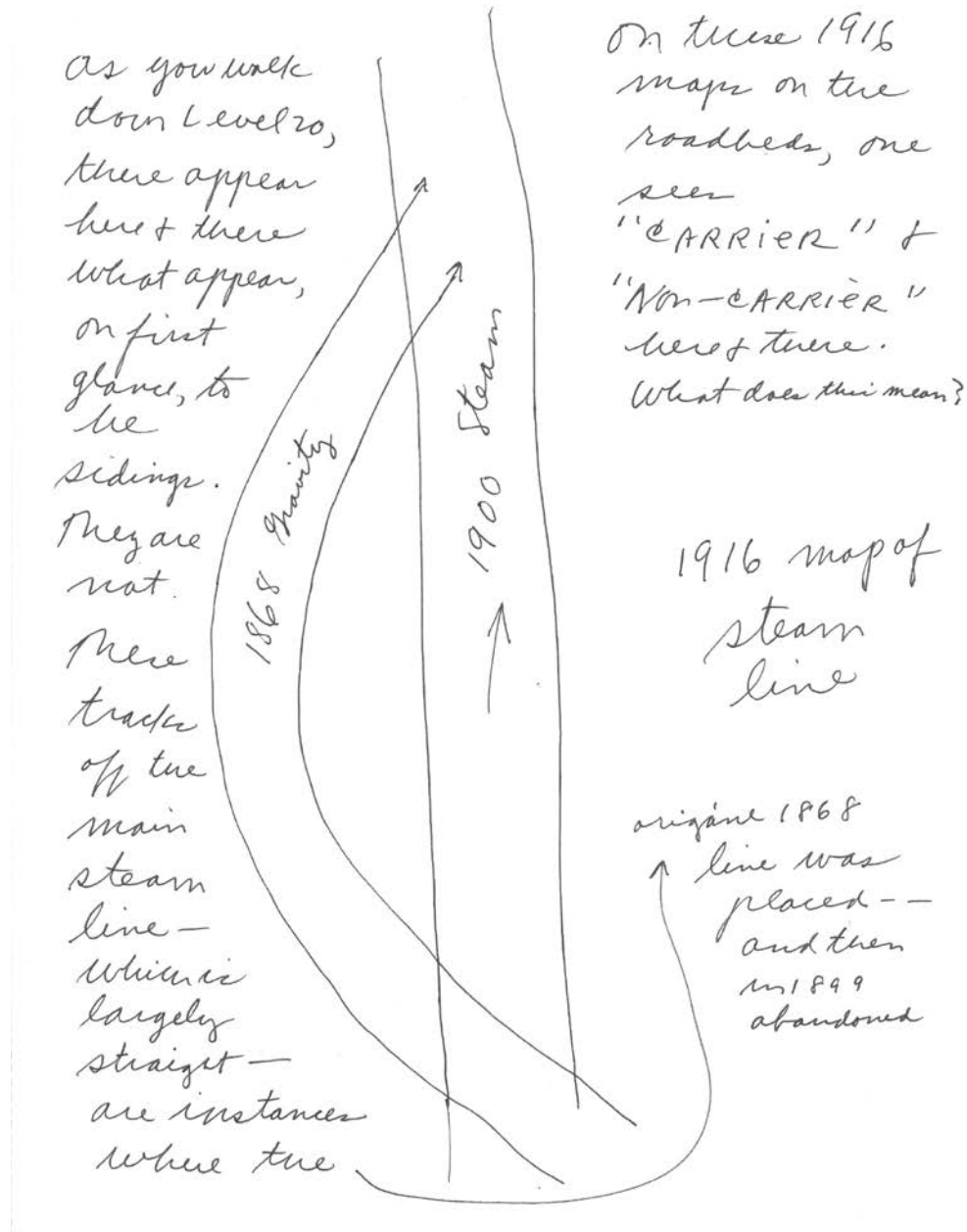
Level 20 in its descent towards Shepherd's Crook:



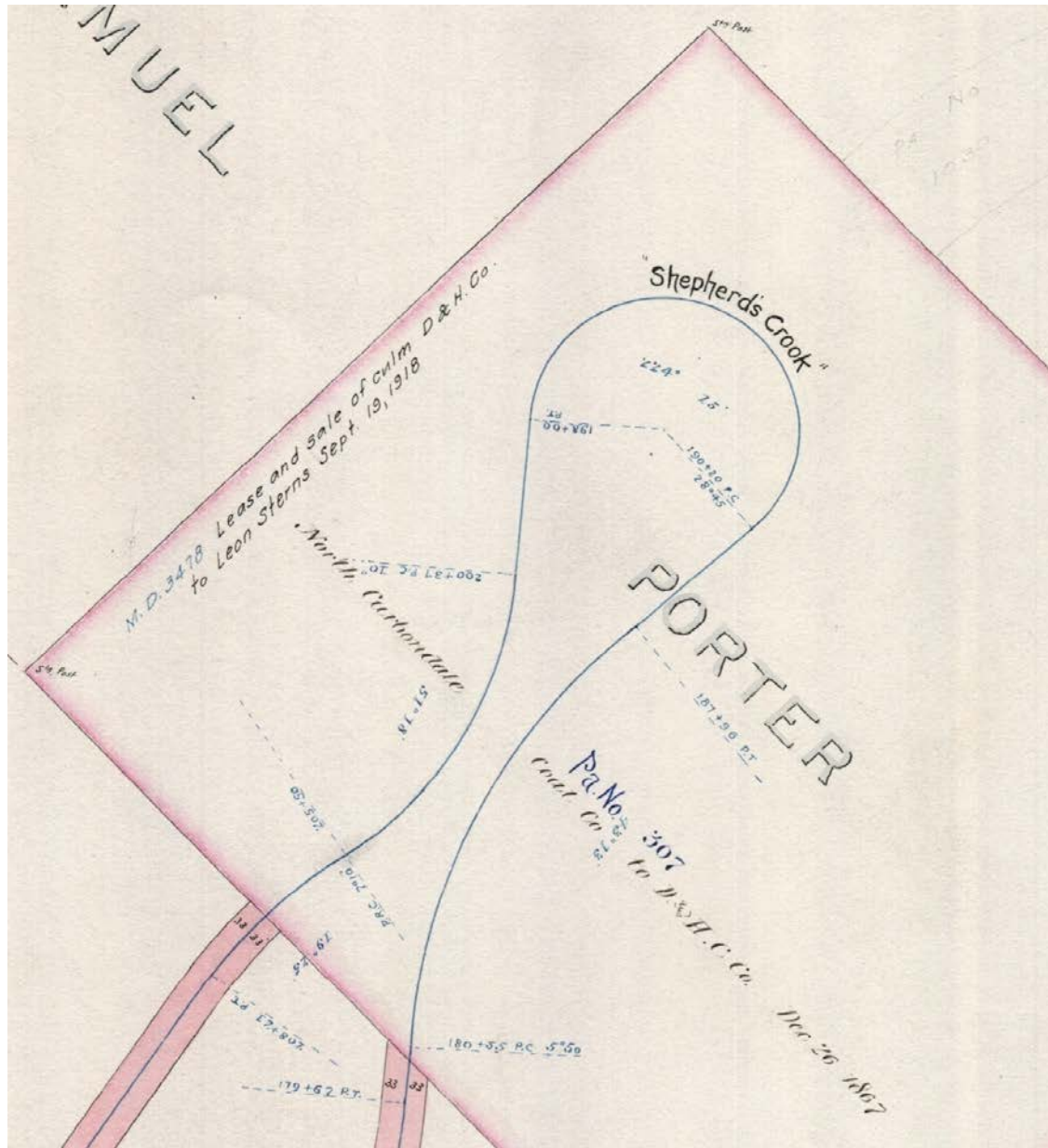
Level 20 descending towards Shepherd's Crook:



One walks today down the route of the steam line (1900). Here and there, to the right and left of the steam line, are what appear to be, on first glance, sidings. These are not sidings. They are instances where the 1868 level (Level 20) was not on the exact same sites as the 1900 steam line. The 1868 route had curves in it here and there. The 1900 line did not, for the most part. This I have tried to make as clear as possible in the hand-drawn sketch that I have produced, which is given below.



Shepherd's Crook



The portion of Level 20 over which Ed and SRP walked (seen in the above photographs) is seen in the Hensel photograph shown immediately below.

*Shepard's Crook, D. & H. Gravity R. R. from Orig. Photo Souvenir of Del. & Hud. Gravity Road.
Published by L. Hensel, Hawley, PA.*



The author and Ed Hodorawis walked along this portion of the roadbed, which descends to Shepherd's Crook

View down the valley:

Hensel No. 1126: "View down Lackawanna Valley from above Shepard's Crook"



Here is what the roadbed looks like today as you enter the tightest part of the curve of Shepherd's Crook:

Entering Shepherd's Crook from the up-hill side of the crook:



In Shepherd's Rook, looking back towards the entrance of the crook (i.e., looking upgrade):



Inside the tightest part of the crook, looking towards the exit:

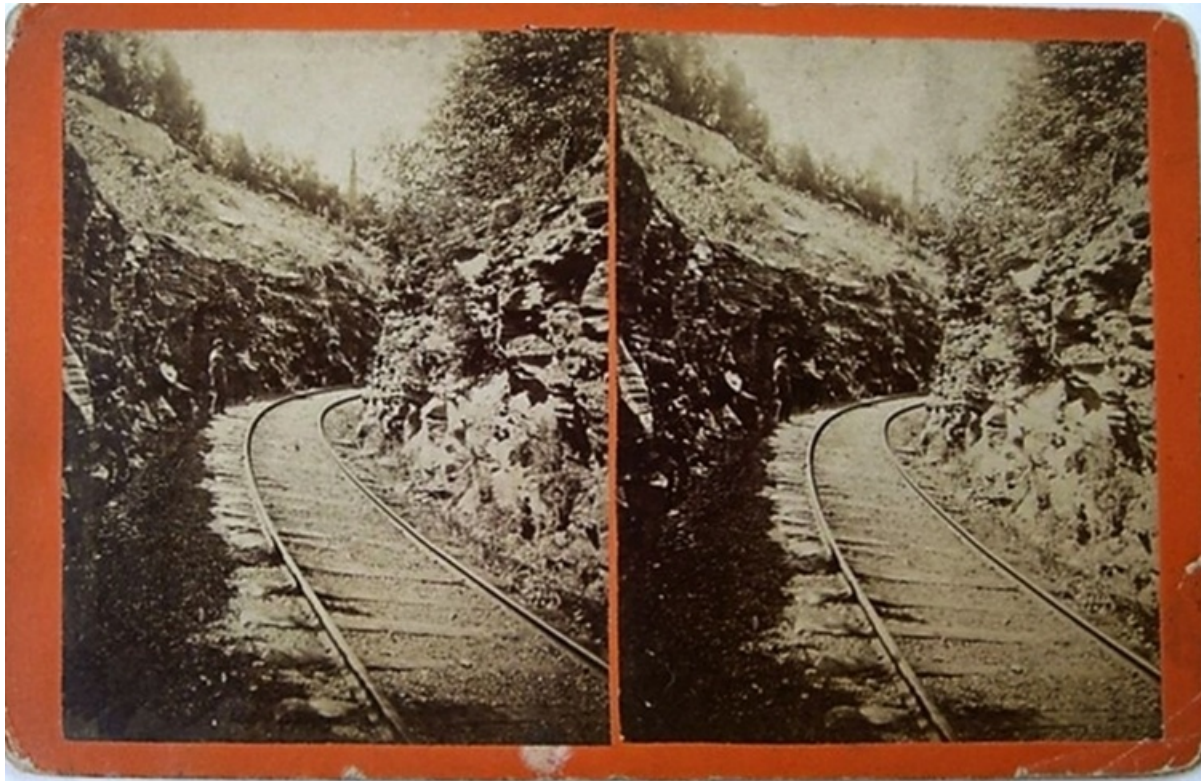


Inside the tightest part of the crook, looking towards the exit:



Here is a photograph, taken by Hensel in the nineteenth century, of the interior section (looking upgrade) of Shepherd's Crook:

Hensel Nos. 1123, 1124: "Views in Rock Cut at Shepard's Crook"



View at Shepherd's Crook, inside the rock cut, winter. Original photo in the collection of the Carbondale Historical Society.

There are still railroad ties embedded in the mud, here and there, in the roadway through this section.



Looking back at the tightest part of the crook, from the track area at the exit of the crook:

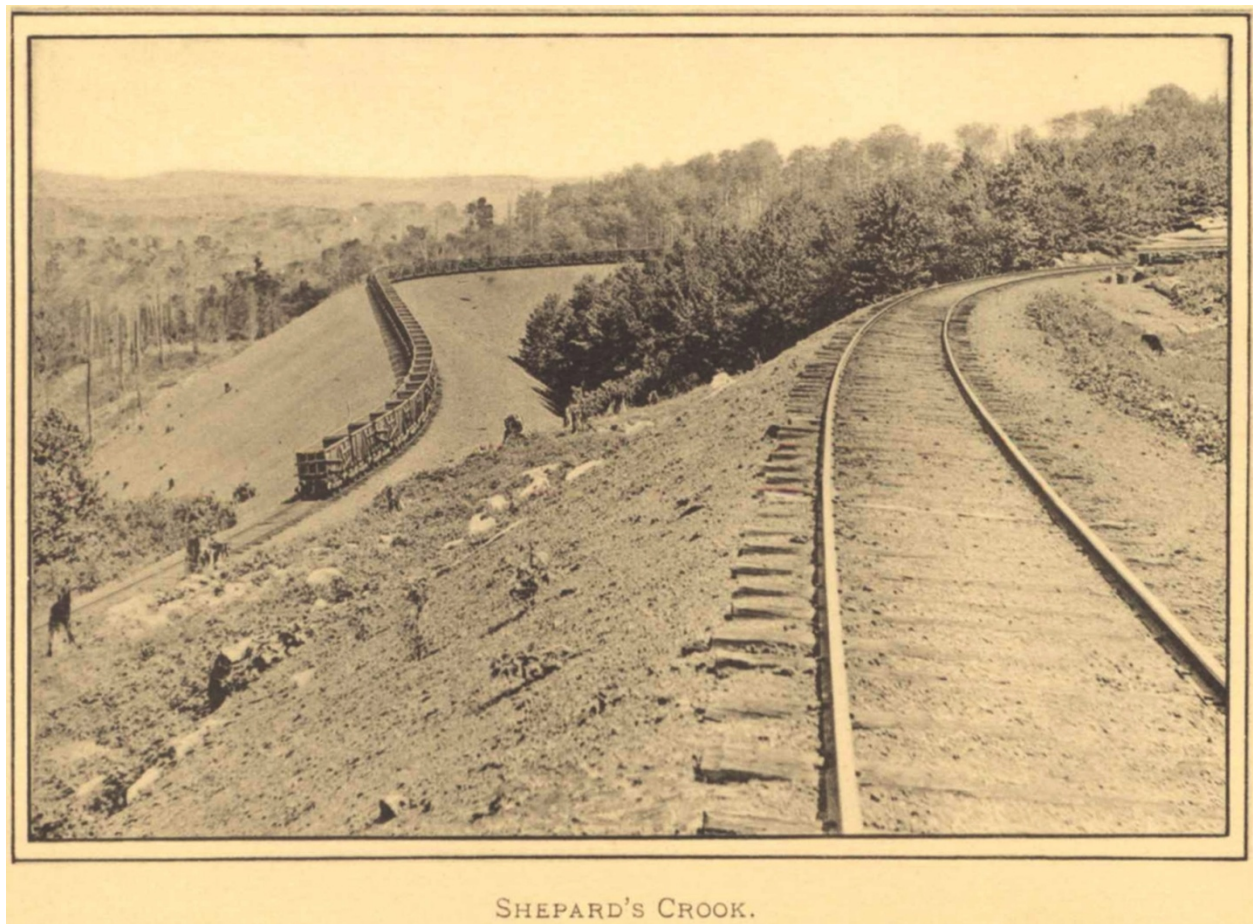


Another view taken by the author, this time in summer, looking back into Shepherd's Crook:



Cars coming out of the tightest part of the crook:

Photograph *Shepard's Crook* that is included in "Souvenir of the Gravity Road / Photo-Gravures of the Old Delaware and Hudson Coal and Passenger Road, between Carbondale and Honesdale, Pa., Published by W. B. Foster, Photographer, Carbondale, Pa."



SHEPARD'S CROOK.

Hensel No. 1121: "View of Passenger Train on Shepard's Crook"

These cars are coming out of the crook and heading down into White's Crossing and on south.



Hensel No. 1122: "View down Lackawanna Valley from Shepard's Crook"



This section of Level was very celebrated because of the proximity of the two tracks, the one entering the crook, and the other exiting from the crook. The closeness of the two tracks is easily seen in the Hensel photo given below:

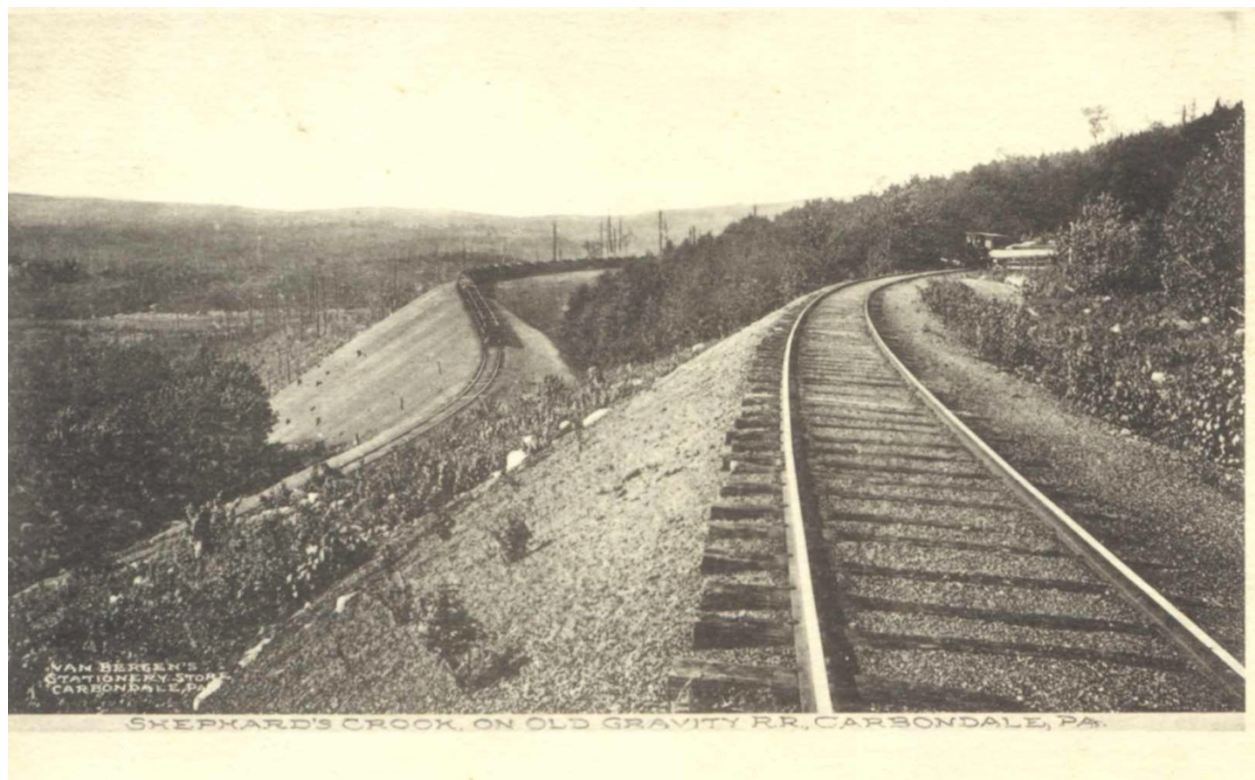
Shepard's Crook, D. & H. Gravity R. R. from Orig. Photo Souvenir of Del. & Hud. Gravity Road. Published by L. Hensel, Hawley, PA.



The author and Ed walked along this portion of the roadbed, which descends to Shepherd's Crook

The tightest part of the crook:

Shepherds Crook was a loop, about four hundred feet in diameter and two thousand feet in length, with a grade of one hundred and ten feet to the mile.



All of this fill was removed following the closing of the Gravity system and its successor, the steam line.

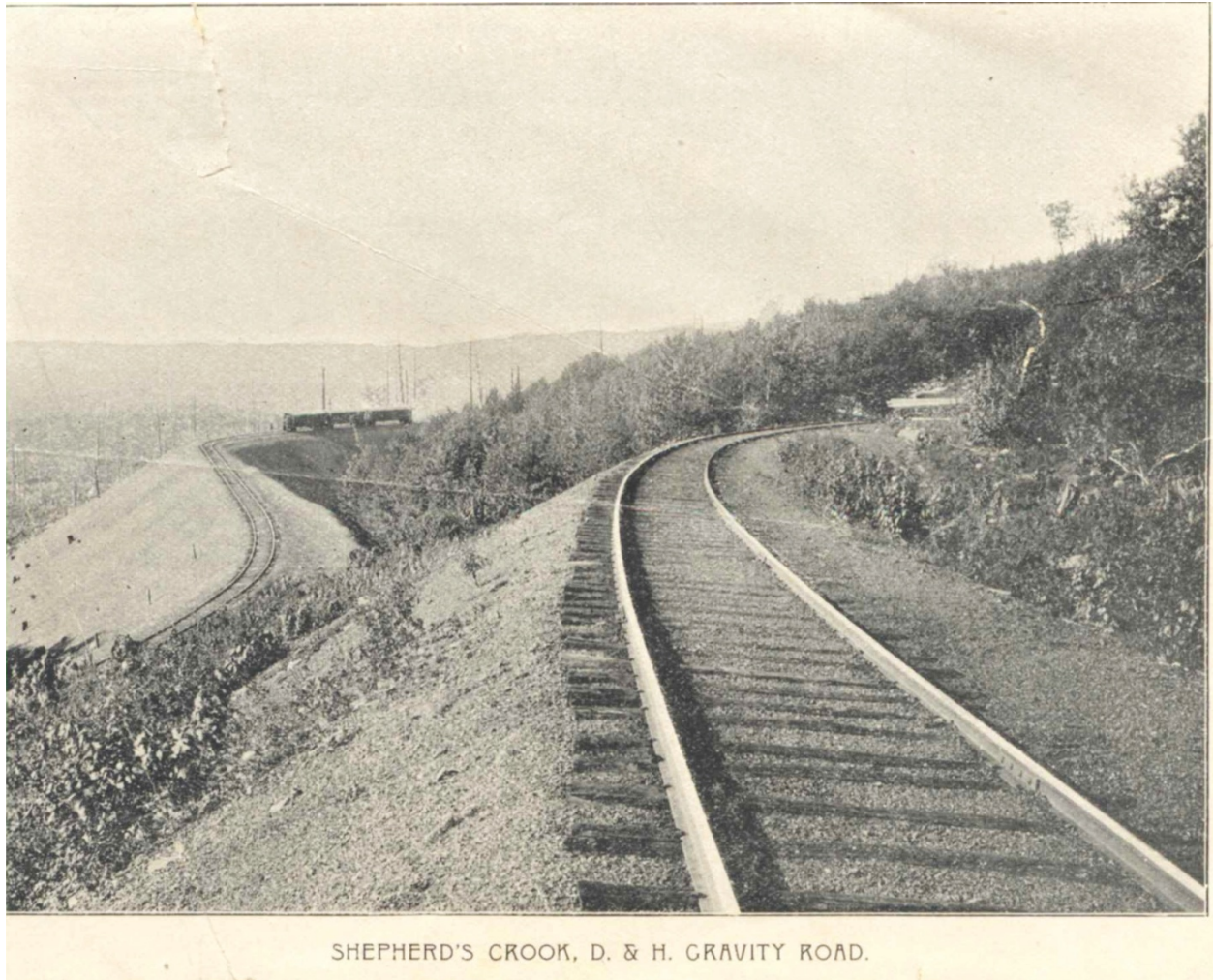


This roadbed (minus the ties and rails) is still very visible today.

This photograph, taken at Shepherd's Crook, is in the collection of the Carbondale Historical Society.



Another published view of Shepherd's Crook:



SHEPHERD'S CROOK, D. & H. GRAVITY ROAD.

In the photograph given below, we see the same view that is shown in the above photograph.

Level No. 20, having passed through the tightest part of the crook, now descends towards White's Crossing. This track was 82feet away, horizontally, from the track shown on the right.

Level No. 20 descends towards Shepherd's Crook. This track is thirty-seven feet higher than the track at the left, which was 82 feet away horizontally.



Shepherd's Crook:

A remarkable feature of the 1868 configuration was the celebrated Shepherd's Crook on the light track that was installed at this time, and removed on November 19, 1899.

In a series of newspaper clippings in one of the Gritman scrapbooks about the removal of Shepherd's Crook (and the installation of a switchback in its place) in 1899, there is the following clipping, dated Saturday, November 18, 1899:

"What's in a name? The question has been asked many times, and if it hasn't been answered, it should be. There's everything in a name. This same thing, only in another sense, undoubtedly has been asked regarding what is known as Shepherd's Crook, on the line of the old gravity road."

The above question is answered immediately below the above question in the newspaper clipping cited immediately above, dated November 18, 1899. From this second clipping, most probably from the same newspaper in its edition of Monday, November 20, 1899, we learn interesting facts not only about the naming of Shepherd's Crook, but also about the physical dimensions/construction of the crook:

Hiram Marsh Suggests the Name

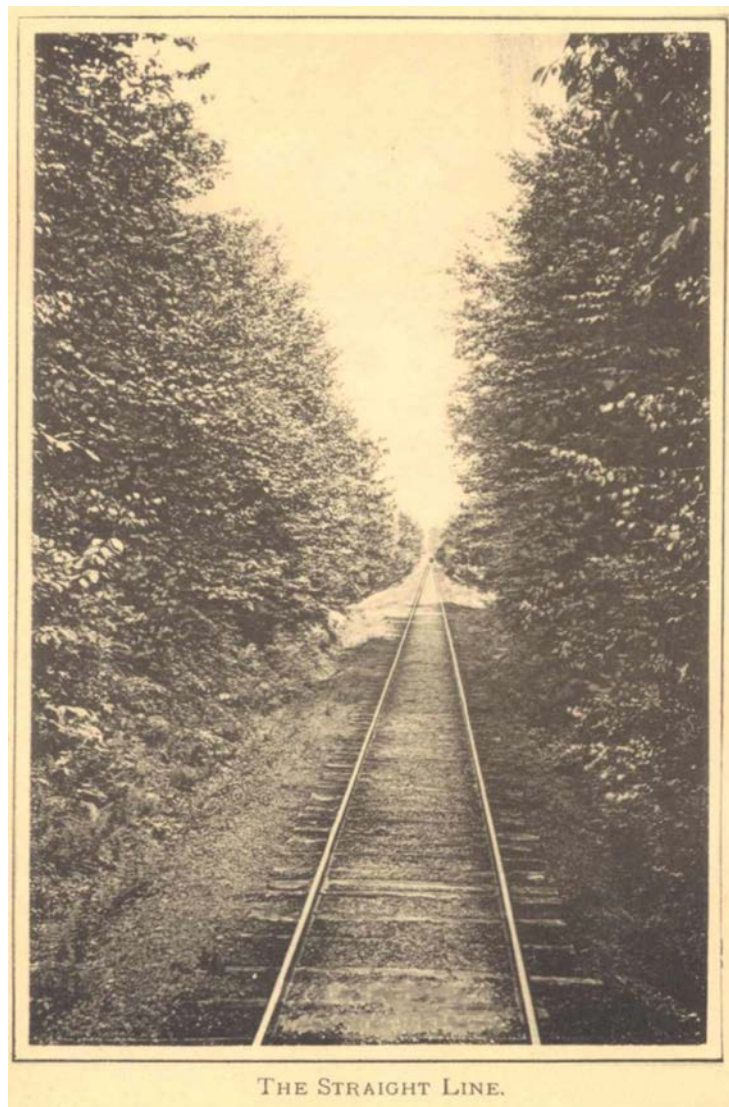
"The cognomen [Shepherd's Crook] came about in a queer way. It was more of a joke than anything else, yet has obtained for years, and probably would continue were it not for the fact the famous curve was on Sunday [November 19, 1899] obliterated. Some of the older residents will undoubtedly remember that O. D. Shepherd, the engineer in the employ of this city, was for many years in the employ of the Delaware and Hudson company and that he had charge of the building of this part of the road. This was in 1867. Hiram March was general foreman over a force of men; and one evening while at the company's office he suggested that this peculiar curve be known as Shepherd's Crook and it has gone by that name ever since."

The part of the loop that was out in the valley:

"On the outer side [of Shepherd's Crook] there was a wall of stone thirty-five feet in height in the centre and upon this there was a crib work of another thirty-five feet and on top of this there was a trestle work of twenty-five feet in height. It was partly filled with earth and stone and some years later it was completely filled with culm. It will be remembered that where the two lines at one point in the crook paralleled that they were only seventy feet apart and one road bed was thirty-five feet lower than the other."

"The Straight Line" below Shepherd's Crook

From the Foster photo-gravure booklet: "Souvenir of the Gravity Road / Photo-Gravures of the Old Delaware and Hudson Coal and Passenger Road, between Carbondale and Honesdale, Pa., Published by W. B. Foster, Photographer, Carbondale, Pa." See "catamount" notice given under "Accidents, Facts about the Plane, and Daily Life" given below, p. 507.



Before we leave this section of the country, it is well worth our time to have a look at the scenery here, which attracted vast numbers of people to visit this area in the nineteenth century. These photographs of the various falls on Panther Creek were all taken by the author.

The photograph shown here was taken at the top of the mountain, where Panther Creek begins its descent of the mountain through a series of beautiful waterfalls. In this view, we are looking in the direction of Simpson:



The body of water at the top of Panther Bluff was known locally as 'Big Panthers,' shown here with most of the water gone, but with Panther Creek still flowing into the area. The water was held back by a dam, constructed largely of wood. The remains of the dam can be seen in the center foreground of this photo.



The falls at the top of Panther Bluff, seen from above the falls:



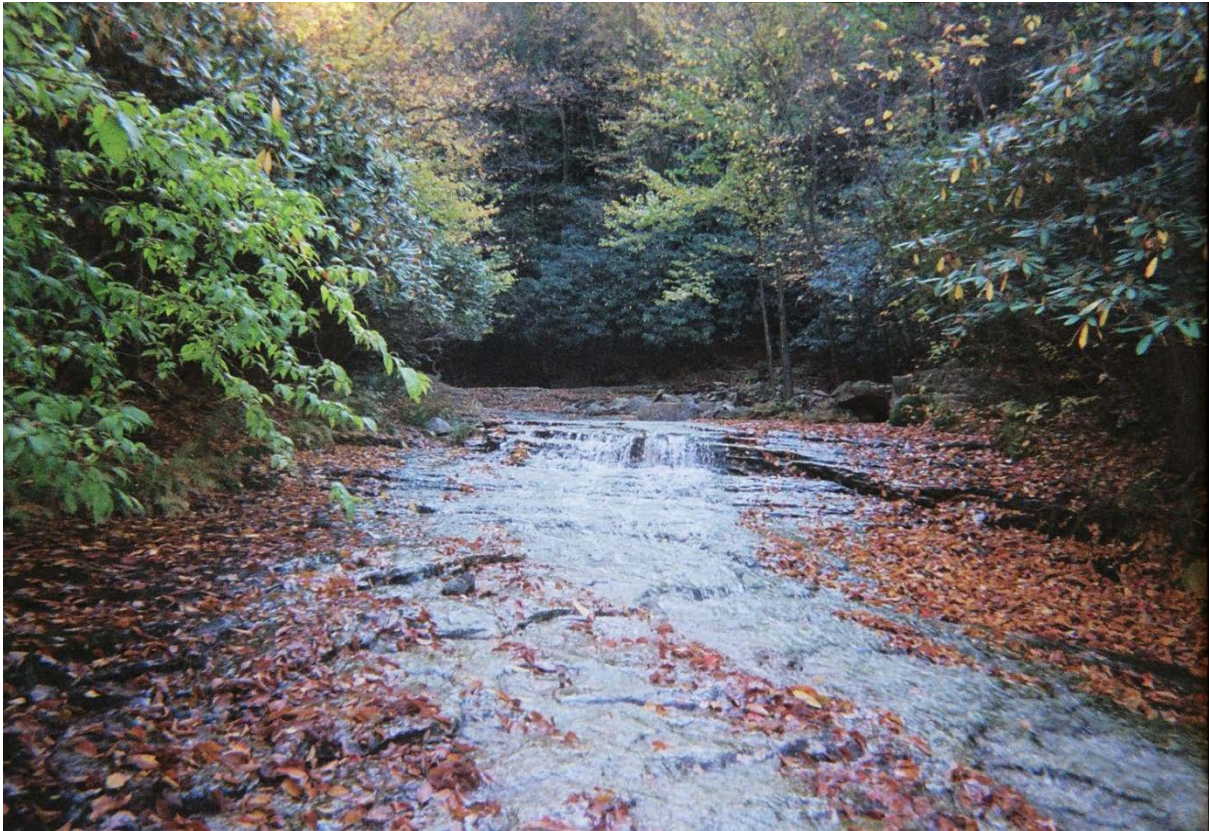
The falls shown above, seen from below the falls:



Another falls on the descent of the mountain:



Another falls on the descent of the mountain:



Another falls on the descent of the mountain:



Another falls on the descent of the mountain:

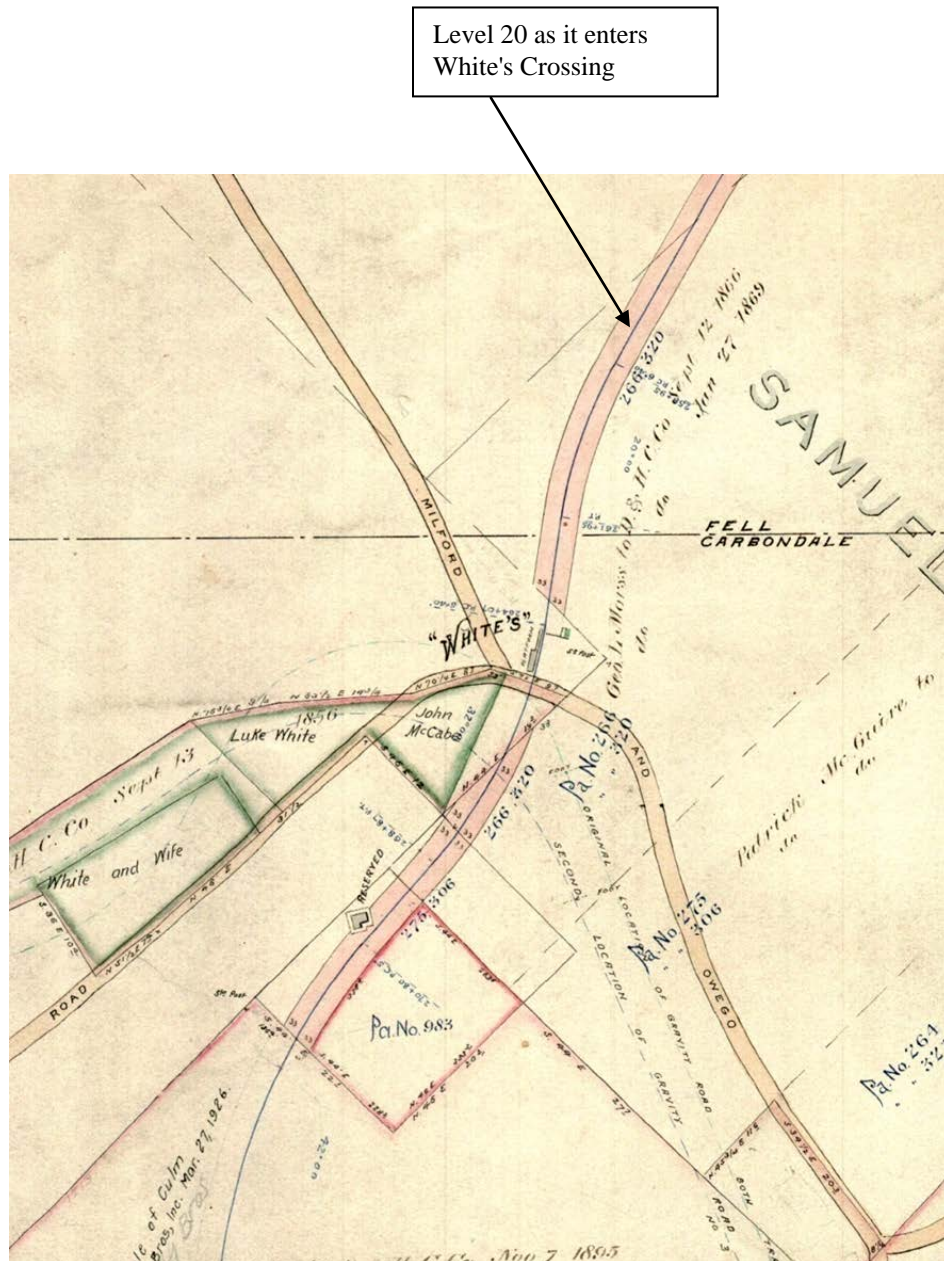


"Panther Bluff Creek Gorge. This spectacular ravine on the west flank of the Moosic Mountains just southeast of No. 10 Falls on the Lackawanna River exposes a continuous series of rock pavements and cliffs starting at an elevation of about 1750 feet and extending down to the level of the river at about 1200 feet. Of the numerous waterfalls over ledges of Pottsville sandstone and conglomerate, the highest and most picturesque is the 100-foot high Panther Falls. This cascade is located near the top of the steep part of the mountain slope, its base being at roughly the same elevation as the bend in the 'Shepherd's Crook' on the old D&H Gravity Railroad. . . The creek was the source of water for the steam locomotives on the gravity railroad and also formerly supplied Carbondale with part of its water supply (from a reservoir at the top of Panther Falls). The former water line tract is now used as a hiking path from the O&W to the middle and upper falls." (*Upper Lackawanna Watershed Conservation Management Plan, Final Report, January, 2002, Chapter 1, Introduction & Background, pp. 32-33*)

Level 20 enters White's Crossing

1895 Gravity Railroad map:

White's Crossing section of level between Farview and Carbondale:



The light cars continued southward to Carbondale or Archbald by means of the Blakely Level which was extended northward for this purpose. "The Carbondale cars left the Blakely level at the 'Powderly Latches,' [latches are self-acting switches] near Bushwick, from which point they moved over the loaded track to their destination. The 'Blakely' plane [from the D&H station on North Main Street to the top of Salem Avenue] was now abandoned." ("Our Own Gravity Road," *The Delaware and Hudson Company Bulletin*, July 15, 1925, pp. 6, 9-11)

Ed Casey was incorrect when he said (May 13, 2013) that the link between the light and loaded tracks at Bushwick was established in 1877. The link was established at the time of the 1868 configuration.

The light track from Farview to Archbald passed through the Bushwick section of Carbondale/Carbondale Township. Bushwick begins at Center Street on Gordon Avenue and includes all of Carbondale Township to the south. On Upper Powderly it begins at the City line (Ruselevege Hall?; a man by the name of Rotel knows a lot about Bushwick). When the Gravity road was converted to a steam locomotive road at the end of the nineteenth century, one of the station stops was called "Bushwick."

The Light Track from the Lincoln Avenue station area down to Archbald

On April 19, 2012, Tom Romanyshn and S. Robert Powell walked on the roadbed of the former light track from the Lincoln Avenue Station area to the south. Here are eight photographs that SRP took on that walk:

The cut through the rocks here was surely made to maintain the grade on the trip down the valley.



Gravity roadbed: straight ahead.



Gravity railroad beds have a way of not going away.



The original drain under the roadbed here was surely the pipe seen the center of the photograph. At a later date, the substantial stone bridge was constructed here.



Unmistakably, a Gravity Railroad roadbed through the woods.



Post and lintel construction on a draining ditch under the roadbed.



Abutment for bridge over the Powderly Creek on its path down the mountain to the valley floor. An extensive trestle was constructed here to carry the roadbed on its journey southward towards Archbald.



A side view of the same abutment.



Another view of the same abutment.



Accidents, Facts about the Plane, and Daily Life

Accident at Cape Horn:

“David Yethers and wife, of Gibsonburg, who were returning from a visit to their daughter, met with an accident on the Canaan turnpike, near Cape Horn [just below No. 4 Pond], on Monday. Their horse became frightened at some cars standing on the track, and cramped the wagon in a manner, which threw both of them out. Mr. Yethers sustained some very severe bruises about the side and shoulders, Mrs. Yethers escaped uninjured.” (*Carbondale Leader*, July 20, 1872, p. 3)

Love conquers all in Bushwick:

“LOVE AND PUGILISM IN ‘THE BUSH.’ / There are quite a number of thickly-settled localities in the suburbs of this city [Carbondale], and among these one of the most noted is ‘the Bush,’ which is in the vicinity of the Powderly mines. The population of ‘the Bush’ is quite numerous. The settlement contains many buxom damsels as well as large number of hardy boys. The Bushites are an industrious people and live by the sweat of their brows. Strange to say the girls of that populous place are capable of loving and being loved. Leastwise so it is reported, and we are inclined to believe it. The latest love affair of ‘the Bush’ was made public recently and in a manner which made all the Bushites talk. / One of the boys fell in love with a maiden in her teens. He loved her passionately, fondly, devotedly. She loved him more than all the adjectives and adverbs in the English language can express. He is muscular and somewhat plucky; she is plump and healthy, but she is cross-eyed. That made no difference to the young man. He could see love in her eyes even though one of them was inclined to be looking in the wrong direction at times. He asked her to be his and she agreed to marry him. Thus far all went smoothly. When he told his relatives of his engagement they objected, particularly his two brothers. And the only excuse they had for objecting was because his intended was cross-eyed. The lover listened not to these objections of his nearest kin, but made preparations for the wedding. Seeing that he was determined to marry the cross-eyed maiden the brothers remonstrated with him and endeavored to show him that the girl was not, as the saying is, ‘good enough’ for him, simply only because she was so unfortunate as to have an eye which she could not control. These arguments made no impression on the lover, and he visited his dear one as often as ever. A few days before the marriage was to take place the enraged brothers had an interview with the engaged one. They swore, unless he would promise them then and there to break the engagement, that they would thrash him soundly. He calmly told them to ‘pile right on.’ They ‘piled on’ without any further ceremony, and in just about three minutes they were both whipped by their muscular and plucky brother. He will marry the girl soon. The Bushites are all on his side, and the brothers are exceedingly quiet since he thrashed them.” (*Carbondale Leader*, January 15, 1876, p. 3)

Fire raged at Shepherd's Cook :

“A very large fire raged around Shephard’s crook last Sunday, but it was gotten under control before any damage was done.” (*Carbondale Leader*, May 18, 1883, p. 3)

New rail on light track near Yarrington's:

"Nearly one-half mile of new rail was laid on the light track near Yarrington's, the last three days of last week under the supervision of Wm. McMullen." (*Carbondale Leader*, June 1, 1883, p. 3)

Ditches being cleaned on light track:

"The ditches on the light track are receiving a general cleaning out." (*Carbondale Leader*, October 19, 1883, p. 2)

Pengally has a narrow escape at Shepherd's Crook:

"Thomas Pengally met with a narrow escape last week in the rock cut at Shepherd's crook. He was engaged with others in running the side plow, better known as the 'Flying Devil,' and as they made the short curve at that point lost his balance and fell backwards off the car. Wallace Dimmock [foreman of the mountain line] saw him fall and with a thought like a flash he drew in the wing and saved Tommie from serious injury, if not instant death. As it was his escape was miraculous." (*Carbondale Leader*, January 4, 1884, p.2)

Panthers at *Panther Buff* as late as 1884:

"A catamount was shot yesterday on the long 'Straight Line' below Shepherd's crook." (*Carbondale Leader*, November 14, 1884, p. 1). See the Foster photo given above (p. 485) of "The Straight Line."

The Cougar, Puma, Mountain Lion, Panther, or Catamount (*Felis concolor*) is a fierce cat that lives deep in deciduous forests, rain forests, grasslands, and deserts of North America and South America. These solitary cats can purr but cannot roar. Very athletic, these cats are excellent jumpers, climbers and swimmers.

Cow causes accident on the Gravity Railroad near the Wolcott quarry:

1889: "***ALMOST AN ACCIDENT.*** / A Cow Derails a Gravity Passenger Train—No Damage. / Accidents on the Gravity railroad rarely occur and passengers enter the little coaches with the assurance that a ride over the mountains is quite as safe as it is pleasant. Yesterday afternoon an accident actually took place, but the passengers knew nothing of the danger until the train came to a standstill. As Conductor Hubbard's train was nearing the Wolcott quarry two cows were discovered walking along the track and the train was slowed down before the animals could be driven from the road. Before the train was under way again and just as it rounded the curve in sight of No. 4 Pond, [emphasis added] a large cow stepped from the bushes which line the road directly in front of the running cars. / The head brakeman had barely time to grasp the wheel and signal down brakes before the animal was sprawling in the track. The forward truck was thrown from the rails and the baggage car started down the bank, but the brakeman held the coaches so steadily that

the passengers were not even 'shaken up.' Two men in the baggage car received slight bruises. The brakeman on the front platform hung to the brake and escaped injury and the stupid cow that caused the accident walked off with a slight limp apparently little worse for the battering it had received. / Cattle and horses are allowed to roam at will by their owners and prove very annoying to engineers and brakeman who are compelled to keep a sharp lookout for track obstructions. On Saturday night two horses fell upon the track a short distance below Archbald. The animals attempted to cross the bridge which spans Laurel Run. The bridge is not covered with plank and the horses fell between the cross ties and were unable to extricate themselves. A small boy happened along and realizing the danger he ran to the Archbald depot and told the operator what he had discovered. A telegram was sent to Peckville before the train reached that station and a terrible accident prevented." (*Carbondale Leader*, October 1, 1889, p.4)

Runaway cars at the head of Plane No. 20:

"EXCITEMENT ON THE GRAVITY. / Nine Cars With No Brakes Dash Down the Light Track. / There was an exciting time this morning on the Gravity road shortly before seven o'clock which brought from the engines along the line an alarm that many people supposed to mean fire. At No. 9 on the light track [No. 9 was on the loaded track; possibly the writer means Plane 20, which was the beginning of the light track to Archbald] nine cars became uncoupled from the rest of the train. There were no brakes on them and before the men knew it they had gotten a start that could not be checked. / Down grade they went at a fearful speed gaining velocity at every turn of the wheels. The men's hair almost stood on end as they thought of the result if the runaways should overtake some other trains or jump the track at some point where it would mean great damage to property and possibly loss of life. The cars whistled on like a streak of lightning and it was a wonder they did not leap from the rails. / One of the men employed on the mountain line darted across the hills at the top of his speed for No. 4 crossing. In the meantime the runaway cars were whistling around the curve at Shepherd's Crook at the rate of a mile a minute and no one would have been surprised to see them thrown from the sharp curve over the high bank that overlooks Simpson village. But they got around safely, and on they dashed. / When the cars crossed the bridge above No. 5 plane the engine at that place blew the frantic signal which was thought to mean fire. When they reached the No. 4 crossing the man who had gone across the hills was ready for them, and with a crash the train struck the obstructions on the track and scattered in every direction, demolishing some of the cars beyond repair and strewing the rails with a large quantity of kindling wood. / It was one of the most exciting affairs in the history of the Gravity road and one that might have been more disastrous." (*Carbondale Leader*, February 28, 1890, p. 4)

Braking on the Light Track

In his article titled "Route of Empty Cars, Passenger Trains from Farview to C'Dale Traced by Railroad Veteran" (*Carbondale News*, March 15, 1962, p. 7), Wade E. Taylor describes the braking system used on Gravity cars on the trip down the light track from Farview to Carbondale.

In speaking of Shepherd's Crook, he says: "This was part of the Gravity Railroad 'Light Track' between Farview and Carbondale, the speed being controlled by one man or more according to the length of the train by use of a foot brake which consisted of a series of levers and rods connected between the brake lever and the brake shoe. / The brake lever itself was a piece of hardwood about the size of a 2x4 and was hinged to the car by a bolt through one end with a ratchet on the other end to hold the brake 'on.' The brake shoe was made of iron and was concave to fit tightly against the wheel. / This brake was pushed down by the man in charge by his standing on it or jumping on it. If required he moved to another car and applied another brake, sometimes several more. . [After passing through Shepherd's Crook the light track] went southward through White's Crossing, continuing southward through the East Side of Carbondale, crossing Lincoln Ave., past the Giombetti beaker, recently dismantled, past a breaker now known as DeAngelis Coal Co., gradually swinging to the right past Bushwick, then in a northerly direction and coming out on the D&H main line at Pike Street crossing. / Empty coal cars and passenger trains from Honesdale moved over this part of the Gravity to Carbondale. The only traffic moved [on] this track in an easterly direction was when a bad breakdown occurred on one of the planes of the 'Loaded Track' in which case a narrow gauge steam locomotive named the 'Major Sykes' would haul passenger trains from Carbondale to Farview."

Early Passenger Traffic on the Gravity Railroad

Passengers on the rail line between Waymart and Honesdale and Honesdale and Carbondale as early as 1863:

"Several ladies and gentlemen of Waymart visited Honesdale last week, in the new passenger car which has recently been put on the railroad between those two places. They were well pleased with the trip. It would be a great convenience to have regular passenger and mail trains from here to Honesdale. Could not some means be devised to do this?" (*Carbondale Advance*, June 6, 1863, p. 3)

Passenger trains for Civil War conscripts:

"On the Del. & Hud. Railroad a Passenger train has been run from Honesdale to this city [Carbondale] each morning during the present week for the accommodation of the Wayne county conscripts who report at Easton. The train has been well filled." (*Carbondale Advance*, November 7, 1863, p. 2)

Trial passenger service, Honesdale to Waymart 1868:

"The *Honesdale Republic* of this week has the following item: / RUMOR.--It is rumored that the Delaware & Hudson C. Co., upon the completion of the Jefferson Railroad, about the 1st of June, will place a passenger car on their road, between Honesdale and Waymart, as an experiment. It would be a great convenience to the public, both as regards time and comfort, if a car could make regular trips between Honesdale and Carbondale." (*Carbondale Advance*, Saturday, May 9, 1868, p. 3)

Regular passenger service on the D&H Gravity Railroad was inaugurated in April 5, 1877.

6851

Switchbacks in the 1868 Configuration

There were four locations in the 1868 configuration, on the West side of the Moosic Mountain, where Gravity railroad cars, passenger and/or freight, could be switched from the loaded track to the light track and vice versa.

1. At the intersection of Plane No. 5 and Level 20 (the light track from Farview to Archbald), as seen in the detail from the Gravity Railroad map volume given below.

Accident at head of No 5 on Switchback (reported in the *Carbondale Advance*):

"A German named Charles Shuster headman at No. 5 on the gravity road met with a terrible accident while on duty Wednesday afternoon. A trip of light cars was passing up the plane to be switched at the head of No. 5 to the light track, when Mr. Shuster in trying to jump on as usual--to unhook them--slipped and fell to the ground, the cars passing over his legs, which threw the cars off the track. Dr. Burnett was summoned, and was soon making an examination of the wounds. Dr. N. Y. Leet was also called. The gentleman will probably have to lose one of his legs which is so badly bruised that it will be found necessary to amputate it to save his life. He has the sympathy of a host of friends who will lend him a helping hand in this his time of need. / LATER.--We learn that our first information is in some respects incorrect. It is stated that Shuster was a new hand, employed in some capacity at the head of No. 5 plane. In attempting to jump on a trip of cars while moving, he slipped and fell; the cars passed over his right leg—not over both legs, as stated above—crushing about three inches of the bone. The 'circulation' in the limb this morning (Friday) is very good, and Dr. Burnett, the physician in charge, thinks that amputation will be unnecessary." (*Carbondale Advance*, September 27, 1879, p. 3)

Accident at head of No 5 on Switchback (reported in *The Critic*):

"On Wednesday afternoon a German named Charles Scheutzer met with a very serious accident at the head of No. 5 on the gravity road. Scheutzer is a green hand, having been employed on the road but two or three weeks. A trip of unloaded cars was being switched off on the branch and was going at a rapid rate of speed. Not knowing the danger he ran of losing his life, Scheutzer attempted to jump on the last car but one of the trip. He was thrown twelve or fifteen feet in the air, and when he fell he struck the track and two cars ran over his right leg below the knee. All the bones were crushed into fine pieces. The injured man was taken to a house near by and medical assistance was secured as soon as possible. The physician who attended him took out a number of small pieces of bone with his fingers, and first it was thought that amputation would be necessary. It was thought best to wait a few days to see if there would be any circulation of blood in the part below the wound. Up to Friday noon the leg had not been amputated." (*The Critic*, September 27, 1879, p.3)

A Serious Accident in 1880 at the Switch Back "one and a half miles above town":

"Our much respected citizen, Mr. Thomas Jardien, car repairer along the line of the railroad, met with a pretty severe accident at about nine o'clock on Tuesday morning. He was standing in what is known as the "man pit" under the track of the road, at the Switch Back, one and a half miles above town, engaged upon a car standing over him on the track. Suddenly his car was struck by a runaway train of log cars, which had escaped from the train hands about two miles farther up the line. Fragments of cars and logs were piled upon Mr. Jardien in the pit, and he was taken out in an insensible condition, and taken to the residence of his son-in-law Mr. Fred. Seigel. His collar bone, and three ribs are broken, but fearful as was the accident, and severe as are the injuries, hopes of his recovery are entertained." (*Carbondale Advance*, February 28, 1880, p. 3)

Death of son of Charles Smith, 1881, at No. 5 Plane:

"A sad accident happened near No. 5 plane on the gravity track Wednesday afternoon resulting in the death of an eight-year old son of Charles Smith who is employed at No. 4. It seems the

little fellow was standing on the bridge on which the light track is built across No. 5 plane, and was watching a train of loaded cars coming up, and as is supposed, owing to the noise, did not observe a train of light cars which was then approaching the bridge. He was struck by the train, thrown under the wheels and his body was terribly mangled, life becoming extinct almost immediately. The accident occurred about four o'clock, as the boy was returning home with a pail of wild strawberries which he had picked in the fields. (*Carbondale Leader*, July 1, 1881, p. 4)

More on the death of Friend Smith:

"Fatal Accident. / Friend Smith, son of Charles Smith, aged about eight years, was killed on Wednesday afternoon on the bridge crossing No. 5 plane. He stood on the bridge watching the loaded cars going up, when an empty train which he had not observed struck him, and one car passed over him. One leg was cut off, the other badly cut, and there were also severe cuts and bruises upon the head and body. He was taken to his father's house near by, and Dr. Burnett sent for, but he died in a few minutes, soon after the messenger left." (*Carbondale Advance*, July 2, 1881, p. 3)

Shelter needed at the high-works at No. 5:

"There should be some kind of a shelter built at the high-works at No. 5 for the accommodation of those who are obliged to wait there for the passenger [train]." (*Carbondale Leader*, June 22, 1883, p. 3)

". . . between the Switchback and Hendrick's depot":

"John Tonkin, employed as track hand for Henry Lippert, had his leg injured on Wednesday, by jumping off the cars between the Switchback and Hendrick's depot." (*Carbondale Leader*, June 29, 1883, p. 3)

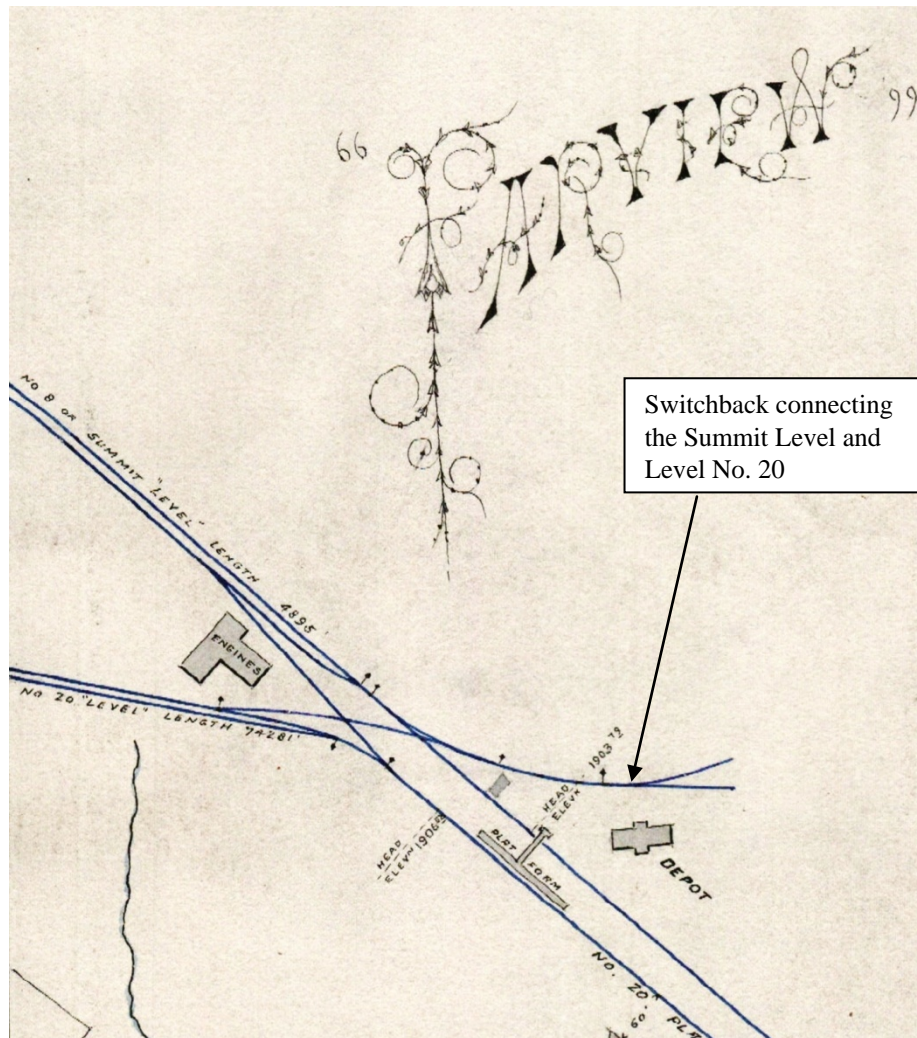
The township road at No. 5 will now cross below the highworks:

"The township road is being changed at No. 5 this week, so that it will cross below the highworks instead of under it as heretofore." (*Carbondale Leader*, October 5, 1883, p. 2)

The highworks at No. 5 have been taken down:

"The highworks at No. 5 is a thing of the past." (*Carbondale Leader*, October 19, 1883, p. 2)

2. At the intersection of the end of the Level No. 8 (the "Summit" level) and the beginning of Level No. 20 on the light track from Farview to Archbald)



A trial run for passenger cars, hosted by Superintendent Manville in 1877:r

“A Delightful Excursion—Trial Trip of the new Cars for the Gravity RR. / On Tuesday morning, upon invitation of R. Manville, Superintendent, a large party of our townspeople assembled at the foot of No. 1, at half-past ten o’clock, to take an excursion around the ‘Switch-back’—to No. 9 and return [via the light track] on the Gravity railroad—in the beautiful new narrow-gauge cars just built for the accommodation of passengers between this city and Honesdale. These cars have the seats crosswise instead of lengthwise, as in the former cars used on the Gravity road. On one side of the aisle are seats capable of holding two persons comfortably, and on the other side of the aisle are seats that will seat but one person each. The cars are neatly painted and upholstered, have the same kind of windows, blinds and fastenings as more pretentious cars, and are built especially strong while looking light and airy. / The baggage

and smoking cars are also perfect models of comfort and convenience. / About one hundred and fifty of the ladies and gentlemen men of Carbondale gladly availed themselves of the invitation extended by the brothers McMullen, assistant superintendents, from their worthy chief, and after all were comfortably seated the rope was pulled, the bell rung, and up plane after plane went the fairy-like train toward the clouds, loaded with precious freight. After reaching the top of the mountain, the train was switched upon the ‘empty’ or return track, and commenced its descent. A stop of a few minutes was made at Shepherd’s Crook, to enable the party to view the scenery, after which the train passed rapidly on—skirting the eastern edge of town, giving a splendid view of buildings, shade trees and streets, and the surrounding hills and forests tinged with autumn’s tints—on, on, to the switch below Powderly’s, and then back homeward to the foot of Davis’ plane—thence to the foot of No. 1, where all disembarked and proceeded home to diner, well pleased with the delightful trip. Too much praise cannot be accorded to Mr. Wm. McMullen, for the careful supervision he gives these excursions. Through his vigilance, and by having careful employes, he takes a party over what would otherwise be a risky route with all the safety of a pedestrian on a smooth street. Well may the Delaware and Hudson Co. be proud of its railroad superintendents, assistants, and employees, for to their care are the public indebted for the fact that no serious accident has ever occurred upon their roads. / We cannot close this article without giving a just meed of praise to Mr. Thos. Orchard, superintendent of the car shop, for the skillful manner in which he has planned and built these pretty little cars. These, and the larger cars constructed for the locomotive road, give evidence that we have in our midst car shops and mechanics equal to those anywhere, and we hope and trust the Company will see fit to have more of this kind of work done here.” (*Carbondale Advance*, October 6, 1877, p. 3)

William McMullen looks after the safety and pleasure of Gravity Railroad passengers:

1886: [William McMullen and Farview] “The excursionists to Farview the present season all heartily endorse the following compliment to one of our popular citizens, which we clip from the *Scranton Republican’s* notice of the “Home” excursion:-- / That these excursions to Farview have been so well and safely conducted is largely owing to the careful, intelligent personal supervision of the assistant superintendent of the road, Mr. William McMullen, who yet does his work so quietly that probably but few of the excursionists know how much they are indebted to him for their pleasure and safety.” (*The Journal*, August 5, 1886, p. 3)

More on William McMullen:

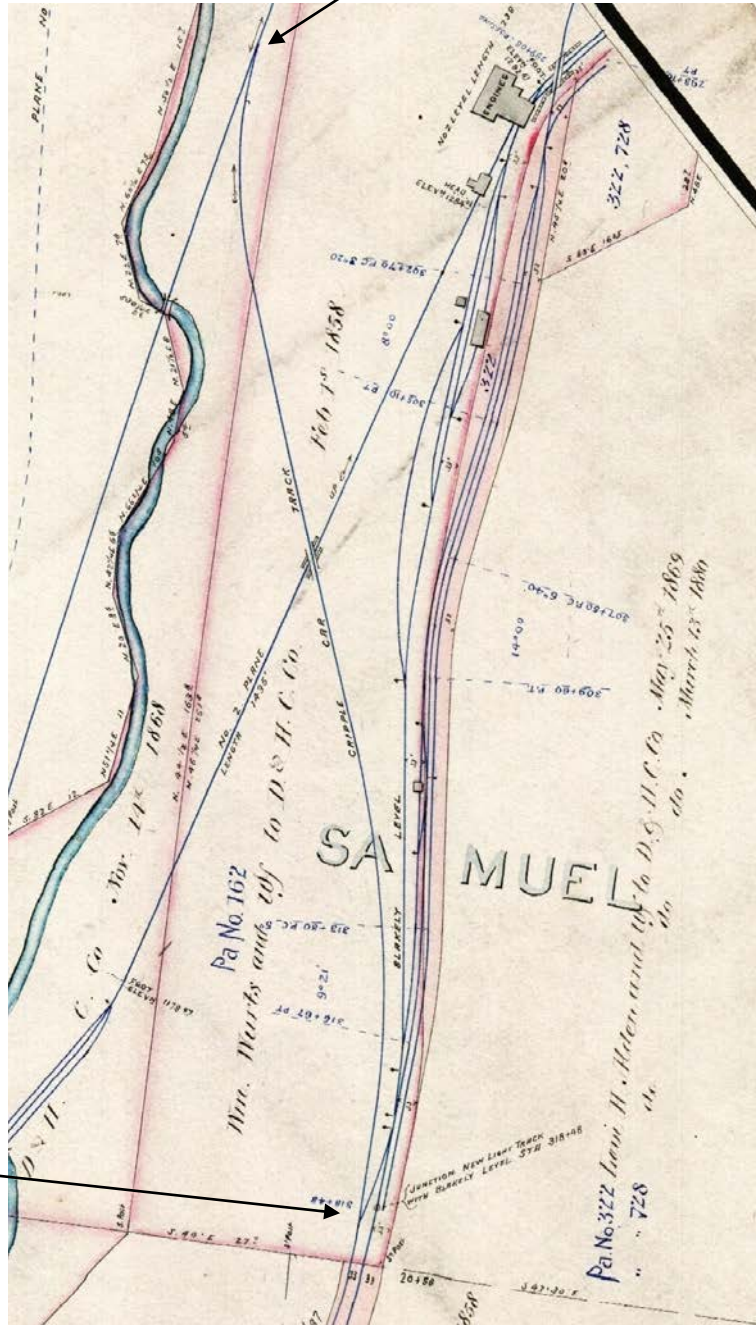
"W. MCMULLEN, master of the trade and transportation department of the Delaware and Hudson Canal Company's railroad, was born March 12th, 1844, in Clinton township, Wayne county, and married Mary Thorpe, of the same county." (1880, p. 452D)

Barney Brennan was a patcher at the Switchback:

“Barney Brennan, a young man employed as patcher at the Switchback, had his shoulder blade broken on Wednesday last by being thrown from the cars.” (*Carbondale Leader*, June 29, 1883, p. 3)

3. At the intersection of Level 20 (the light track from Farview to Archbald) and the Blakely Level / Cripple Car track (discussed in this volume in section 6809)

Switchback on the Cripple Car track



Empty cars that were "crippled" could be switched here to the Cripple Car Track and sent down the mountain for repair.

There were two locations in the 1868 configuration, on the East side of the Moosic Mountain, where Gravity railroad cars, passenger and freight, could be switched from the loaded track to the light track and vice versa.

1. Gill's Latches (see section 6837, herein)

2. Farnum's Latches (see section 6839, herein)

6852

Statistics on the Gravity Railroad after configuration in 1868

“VALUABLE STATISTICS. / Concerning Vicinity Points Gathered by the Editor of the *Honesdale Citizen* / From an industrial circular issue by the *Honesdale Citizen* we take the following data that will be interesting to our readers [of the *Carbondale Leader*?] / THE GRAVITY RAILROAD. / The first locomotive that ever turned a wheel upon a railroad in America was the ‘Stourbridge Lion’; railroad—the Delaware and Hudson gravity; place—Honesdale; date—Aug. 8, 1829; engineer—Horatio Allen, who died at Montrose, N.J., Dec. 91[sic; possibly should read “19”], 1889, aged 87 years, 7 months and 21 days. There is now in Honesdale a witness of the above event, Hon. Otis Avery still living in Honesdale. The first load of coal passed over the road Oct. 9, 1829. The first passenger trains commenced running over the Gravity, April 5, 1877. Gauge of track 4 feet and 3 inches. Weight of passenger coaches, 16,000 pounds. Capacity, 25 passengers. Speed on planes, 25 miles per hour. / A ride of thirty minutes over the Gravity will take you to ‘Farview,’ 2,053 feet above New York city, and one of the most delightful excursion routes in America. / In running from Carbondale to Honesdale on the Gravity, there are twelve planes—eight up hill and four down; the up hill ones following each other are numbered, commencing at Carbondale, from one to eight, number six being the shortest, or 1,252 feet long; number one, the longest, being 1,479 feet. The four down planes are numbered 9, 10, 11 and 12 the shortest being 1,322 feet, and the longest, 1,463 feet, the steepest being No. 5 where the ascent is one foot in 95-100 feet. After descending plane No. 12, Waymart, is reached, and from there to Honesdale—distance ten miles called Ten Mile Level—the cars run by their own gravity, the grade being 43 ½ feet per mile. In returning to Carbondale, there are eight planes, all up hill, numbered 13 to 20, the shortest, No. 14, being 629 feet, and the longest No. 19, 2,630 feet. The grade of No. 13, at Honesdale is one foot in 56-100 feet, and other extreme is No. 18, where it is one foot in 127-100 feet. There are levels between all the planes on the light track; the one from the summit to Carbondale is six miles, called six mile

level, the grade being 110 feet to the mile, at and near Shepherd's Crook. The diameter of the cables is 1 ¼ inches. Honesdale to Farview, via the light track, is 11.30 miles. Farview to Carbondale, Union Station, via the light track, is 12 miles. From Waymart to Honesdale, via the loaded track, is 9.88 miles. Grade, 43.60 feet per mile. Heaviest grade at 'White's,' 117 feet per mile. Longest piece of straight track, 3,433 feet, or 5/8 of a mile. / Carbondale is just 13 miles west of Honesdale in an air line. From the Union depot, in Carbondale, the [sic] Honesdale, via the loaded track of the Gravity is 15.55 miles; and from Honesdale to the Union depot in Carbondale, via the light track, is 23.27 miles. / **PROMINENT ELEVATIONS.** / Honesdale is 985 feet above tide water; Prompton, 1,103 ; Waymart, 1,415; Carbondale, 1,079; Scranton, 740; Gravity railroad summit, 1,947; pavilion at Farview, 2,053; High Point, near Farview, 2,328; the top rail of the highest observatory at Farview, 2,345, . . . Starrucca, 1,424; . . . Hawley, 899; . . . Herrick Center, 1,803; . . . Lanesboro, 982; Susquehanna, 914; Ararat Summit, 2,023; . . . Pittston, 571; . . . R. M. Kennedy's, Mt. Pleasant, 1,760; . . . The lowest point in Wayne county is in Damascus, 765 feet; Irving's Cliff, 1,301, and 337 feet above the waters of the Lackawaxen river, which flows at its base." Clipping in the Gritman scrapbook, dated Friday August 26, 1898]

More statistics on the Gravity Railroad:

"THE GRAVITY ROAD. / 'THE GRAVITY ROAD' as originally located was built in 1828-29. The First locomotive run in America, the 'Stourbridge Lion,' was operated over that portion of the loaded track just West of Honesdale on Aug. 8th 1829. / Gauge of track 4 ft. 3 in. - Weight of rail 46 lbs. per yard. / Weight of Passenger Coach 16,000 lbs, Capacity 25 passengers / **PLANES** / Carbondale to Honesdale (Loaded track) 8 ascending - 4 descending. / Honesdale to Carbondale (Light track) 8 ascending. / Longest plane (No. 19) 2630 ft. / Shortest plane (No. 14) 629 ft. / Average length of planes 1411.55 ft. / Heaviest Grade plane (No. 13) rises 19.76 ft in 100 ft. / Lightest Grade plane (No. 17) rises 7.18 ft. in 100 ft. / Diameter of Cables 1 ¼" / Speed of trains on planes, about 25 miles per hour / **LEVELS** / Waymart to Honesdale (No. 12) 9.88 miles - Grade 43.6 ft. per mile / Farview to 'Lookout' (Carbondale) 1??? [not legible] miles, average grade 72.5 ft. per mile / Steepest grade at entrance to 'Shepherd's Crook' 110 ["at entrance to 'Shepherd's Crook' 110" is crossed out in the original and someone has written in its place in red ink "White's 117"] ft. per mile/ Greatest Curvature, at the 'Shepherd's Crook,' 224 [symbol for degrees] 15 [symbol for minutes] with radius of 200 ft., nearest points of approach, about 80 ft. / Longest piece of straight track 3433 ft. = 5/8 mile / **TIDE WATER ELEVATIONS** / Wilkes-Barre 549 ft. / Scranton D& H Station 740 ft. / Carbondale Foot of No. 1 1075 ft. / Summit Head of No. 8 1947 ft. / Farview Station 1904 ft. / Farview Floor of dancing pavilion 2031 ft. / Farview Top floor lower observatory 2118 ft. / Top floor upper observatory 2348 ft. / Ararat Summit (R. R.) 2023 ft. / Waymart Foot of No. 12 1416 ft. / Keen's Pond 1277 ft. / Honesdale Foot of No. 13 985 ft." [4 ¾" x 5" blue print statistics sheet, titled "The Gravity Road," in the Gritman scrapbook.

Statistics on Elevations:

“Elevation of Local Points. / We often hear inquiries as to how high an elevation Carbondale has and the following figures will therefore be of interest to a great many people. The city in which we live is 1075 feet above high tide at Philadelphia. The head of No. 8 plane on the gravity road, which is the summit of the mountain, is 1947 feet above sea level and Farview (or the head of No. 9) is 1903 feet above. Waymart is 1415 feet and Honesdale 985 feet above. While we are ‘on the Gravity road’ a few statistics about that farfamed line will not be out of place. No. 13 plane, the first out of Honesdale, is the steepest having a rise of one foot in five. No. 19 is the longest, being over half a mile in length. The engine on this plane is located almost in the middle of the distances. The plane at Olyphant is the lowest having an elevation of 750 feet. The gravity road is fifty three miles in length and has 28 planes.” (undated clipping in a Gritman scrapbook)

Some Coal Shipment Statistics:

The 1866-68 revisions resulted in significant increases in shipments of coal. In 1864, the D&H shipped 852,130 tons of coal; in 1868, 2 million tons. At one point in 1870, there were 350,000 tons of coal piled up at Honesdale.

Statistics for 1892:

"Six Million Tons Were Hauled. / Rondout, N. Y., March 3.—The coal production of the Delaware and Hudson Canal Company for 1892 amounted to 4,396,852 tons, and the company carried for others 1,828,443 tons, making a grand total of 6,225,295 tons of coal handled by this company. / The earnings for 1892 were \$3,035,463, or 10 11-100 per cent. for the capital invested. The company has contracted for 30 passenger coaches, 500 coal cars, and 8,273 tons of steel rails, to be delivered during the Summer." (*The New-York Times*, March 4, 1893)

In 1895 there were about 600 boats in service on the D. & H. Canal; in 1898, about 450 boats; before the Civil War, there were nearly 1,300 boats in service on the canal.

6853

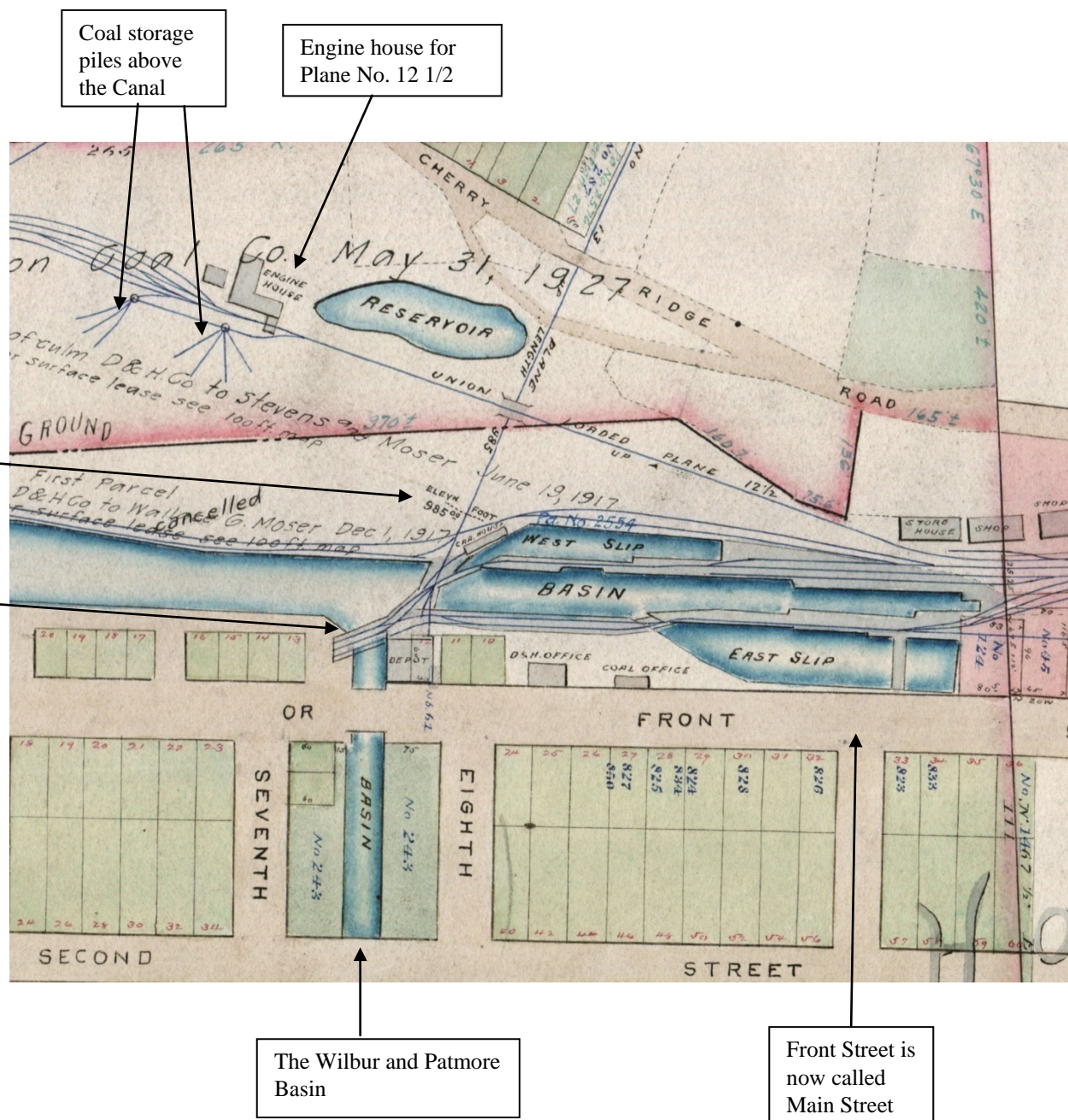
Enlargement of Storage Facilities at Honesdale and Carbondale

Three primary storage facilities at Honesdale (Nos. 1 - 3) and in Carbondale (No. 4)

1. The coal chutes just above the Canal basin; access via Plane No. 12 ½
2. The Pockets above the West Branch of the Lackawaxen River
3. The Erie Pockets in South Honesdale
4. Coal storage after the closing of the Gravity Railroad and Canal

1. The coal chutes just above the canal basin; access via Plane No. 12 1/2:

If the coal in the loaded coal cars arriving in Honesdale could have been loaded directly into canal boats, it was therein loaded. If not, in the period 1829-1861, it was unloaded into the coal storage piles and coal chutes above the canal basin and stored there (up to 100,000 tons) for loading into canal boats at a later date (in the spring if the canal was closed for the winter). These coal piles are shown on the map given below from the Gravity Railroad map volume:



Given below is a remarkable photo that was taken at the top of the coal dumping ground above the canal basin. *Wakefield* reproduces this photo on page 57. Wakefield's source of this photo is the Ellenville Public Library. Wakefield's caption reads as follows: "The loaded cars were rolled by hand out to the turntable where they were shunted out to the ends of the coal piles for dumping."

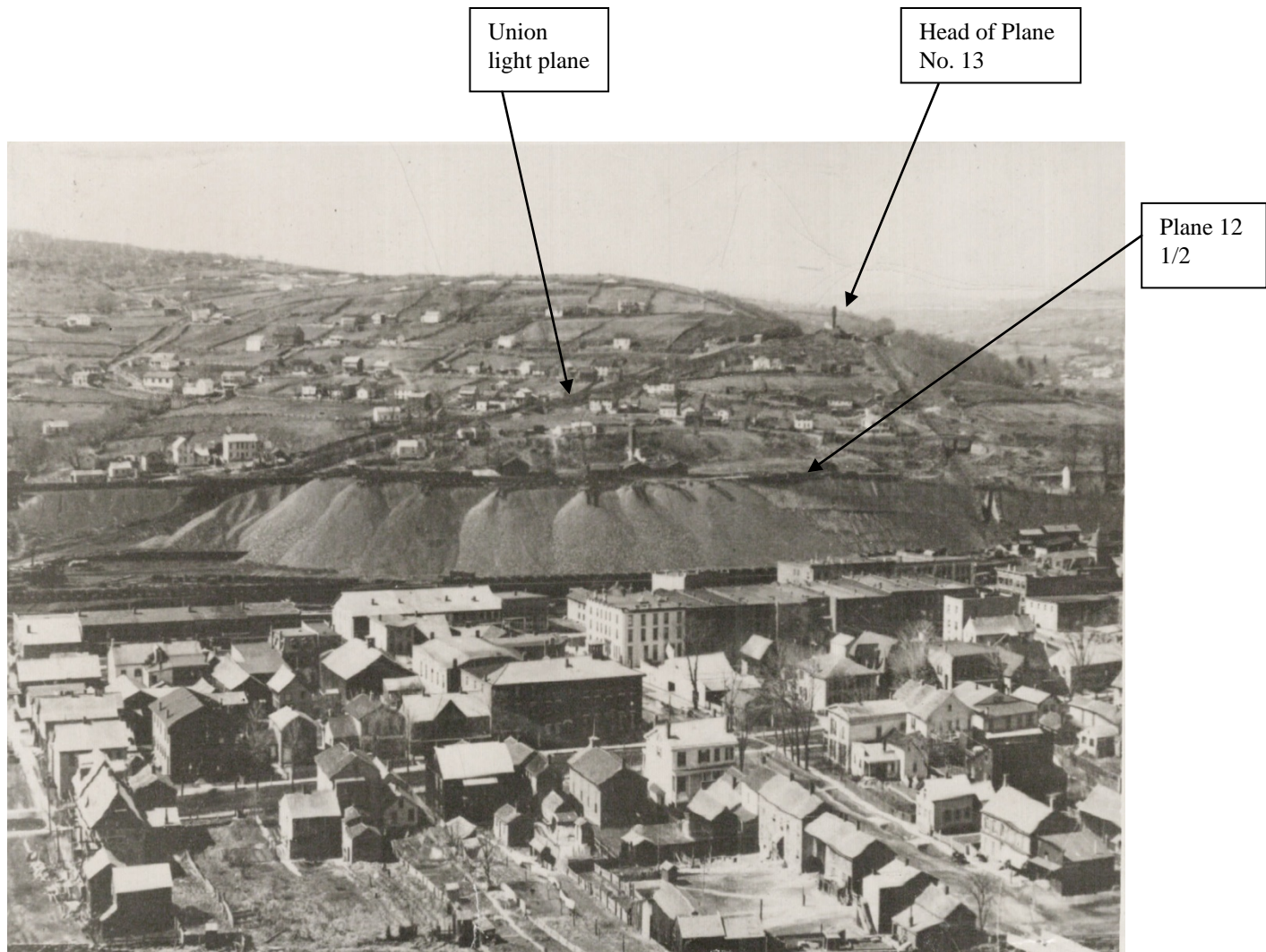
Coal was dumped in these piles during the winter when the canal was frozen over and at other times when more coal was arriving in Honesdale than could be shipped immediately. This dumping ground was on a side track off the Union Loaded Plane 12 ½, which carried loaded coal cars to the Erie Pockets in East Honesdale.

"View of Coal Pile Dumping Ground from Head of No. 12 ½ Plane, Honesdale, Pa." by J. A. Bodie, Honesdale, PA; photo in the archives of the Wayne County Historical Society.



Note the Sprague inserted into the wheel to hold the car in place.

This same dumping ground, seen from downtown Honesdale, in a photograph in the collection of the Pike County Historical Society at Milford, PA:

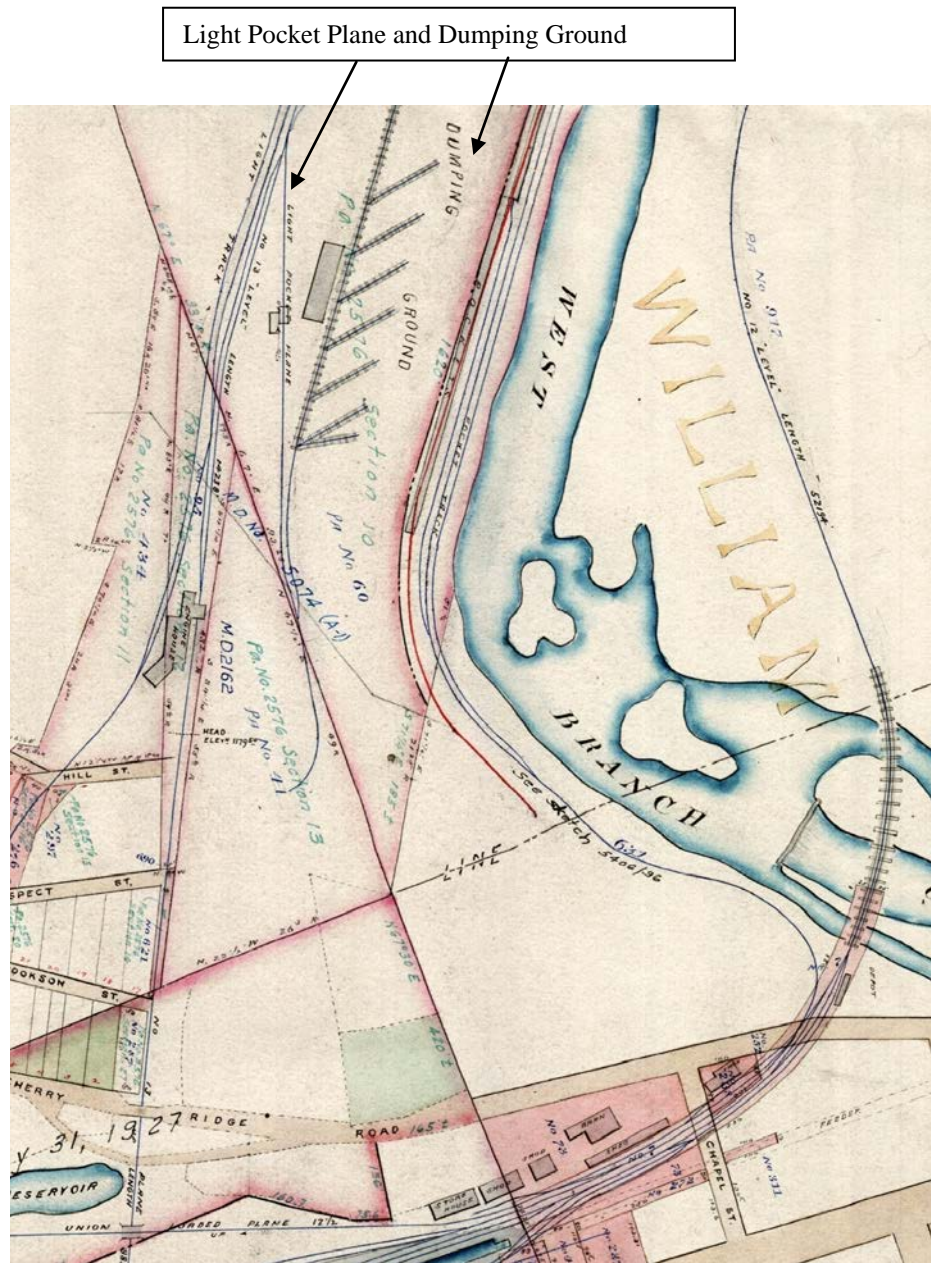


2. The Pockets above the West Branch of the Lackawaxen River --constructed 1861

Honesdale coal pockets, described as “recently constructed” in the notice in the February 23, 1861 issue of the *Carbondale Advance*, given immediately hereafter:

“The Coal Business / Is progressing encouragingly here.--Considerable progress has been made in clearing No. 3 Shaft, at which operations have been prevented by water, and coal will be shipped from it in a few days. The coal shipped is deposited in the huge ‘pockets’ recently constructed at Honesdale.” [emphasis added] (*Carbondale Advance*, February 23, 1861, p. 2)

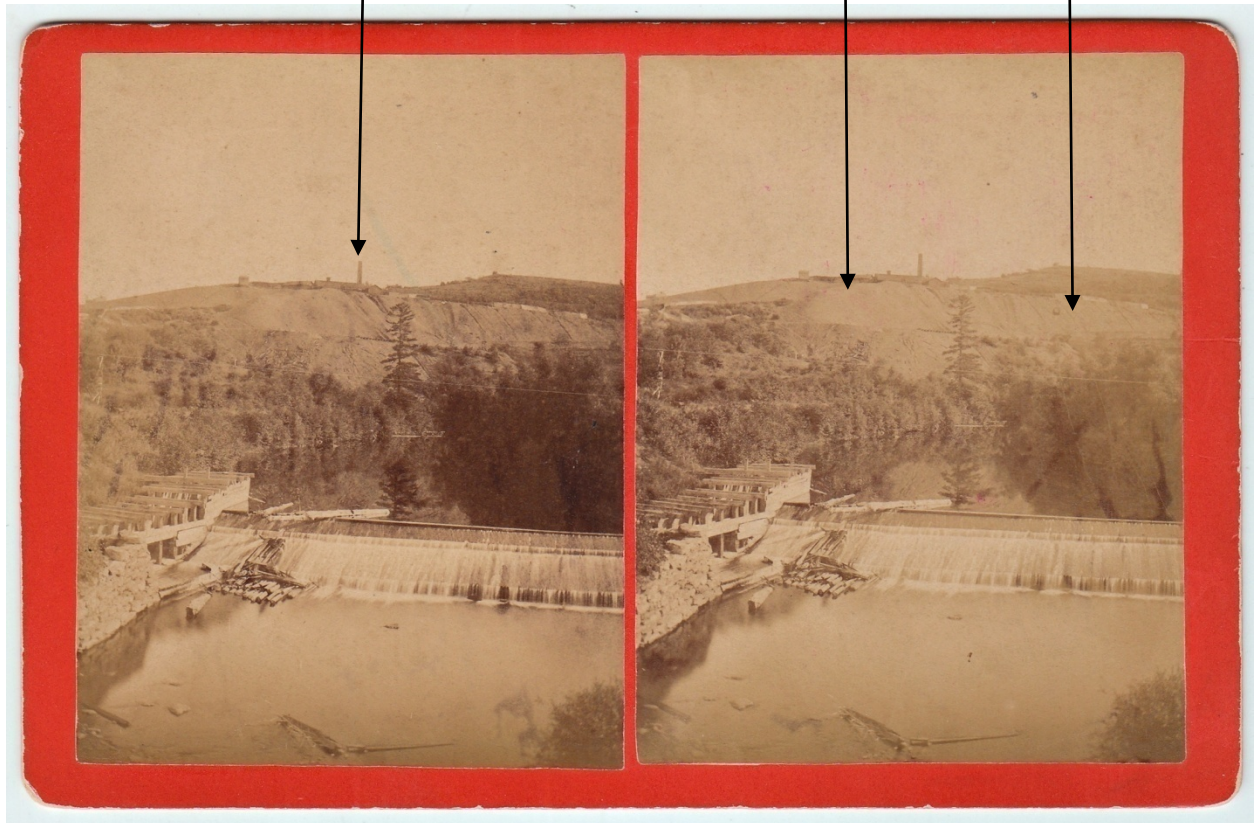
In the area at the head of Plane No. 13, there is a “Light Pocket Plane” (an appendage to Level No. 13) and associated “Dumping Ground,” which are shown on the detail from the 1895 Gravity Railroad map volume given below. Access to this plane was had via No. 13 Level.

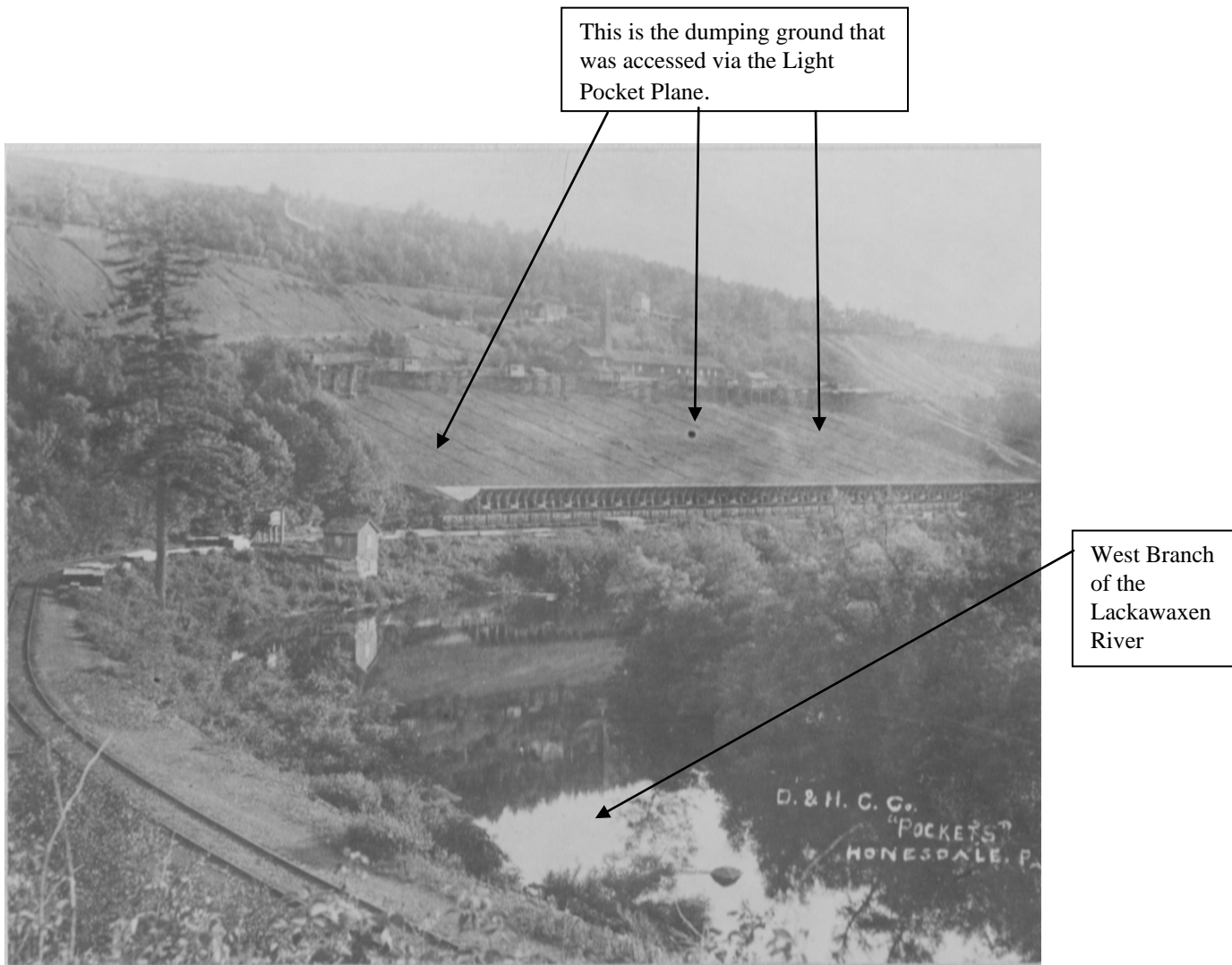


These pockets are shown in Hensel stereocard No. 973.

Smoke stack at engine house
at the head of Plane No. 13

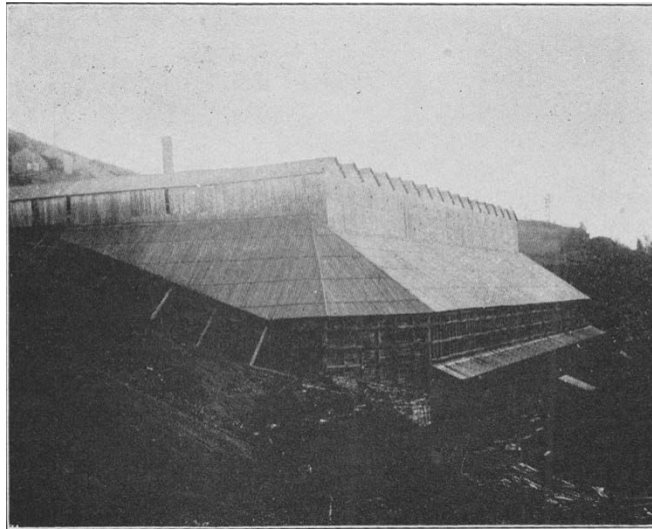
Dumping ground, which was accessed via the
Light Pocket Plane, which was accessed from
Level No. 13





In *COP*, p. 136, there is a photo titled “Covered coal pockets, Honesdale.” Are these covered coal pockets in the photo given below the pockets above the Canal basin or those above the West Branch of the Lacakwaxen River?

Here is that photo of the covered coal pockets in question:



"The 'Pockets,' is the name given to a mammoth frame structure, 910 feet long, 532 feet wide, 80 feet high, in front, and about 20 feet high in rear, lately erected by the Del. & Hud. Canal Co. as a store-house for coal. It is situated near the West Branch of the Lackawaxen, just above this borough, and is built upon a side-hill which is inclined at an angle of perhaps twenty five degrees. At the foot of the building, the whole structure rests upon a stone wall about ten feet in height; it is also kept together, and in its place, by braces, iron rods, wire ropes, &c." (quoted here from article given below from 1861 about the "frightful catastrophe" that took place at the Pockets)

These pockets, in Texas Township, covered an area of over three acres.

Location of the Pockets:

"It is situated immediately west of the old burying ground on the slope of the hill between the river and the head of the plane on the empty car track. Three engines are connected with it, all supplied from one set of boilers. The use of the building is to store coal of assorted sizes. The loaded cars are drawn up an inclined plane, and then run upon the top of the building. . . Here the coal is dumped into vast pockets, having an inclined floor, so that the contents can be drawn out at the lower side through gates into the cars and carried to the boats in the basin. Although the roof is not yet on, coal is being deposited in the building. The whole cost of construction is about \$200,000." (Honesdale *Democrat*, March 4, 1861)

During construction of the building, it slid several feet downhill. It was dragged back. A new foundation was built for the wall. Vernon Leslie, *Canal Town*. . . , pp. 80, says:

“In order to explain the cause of the horrible accident which eventually occurred at the Pockets, more needs to be said about the method of delivering coal there. A turntable device made it possible to run cars over tracks on the roof which extended to each storage section or pocket in the building. Once over a pocket, a car was unloaded into it by dropping the contents some fifty feet. / As the new wall of ‘cyclopean proportions’ was approaching completion, fill was needed for the floor of the building, and this was being supplied by running cars over the roof and dumping them . . .”

“It was in this operation [running cars out on the roof and dumping them] that the terrible casualty occurred. [December 14, 1861] The machinery for running cars from the turn tables over ‘the Pockets’ was disarranged, and a dozen or more men, by muscular energy shoved each car out. When a gang had got a car some twenty feet from the farther end, the railroad track gave way, and all were precipitated to the bottom, a distance of fifty feet. The car fell with the top downwards, and the timber, torn away in the descent, fell in a promiscuous mass.” Honesdale *Democrat*, December 19, 1861:

Leslie, p. 80-81: “It was later confirmed by the coroner’s jury that some of the braces had fallen out of the area where the accident occurred, that this was known, and that the head overseer had given orders not to run cars over areas where braces were lacking. It was also established that the overseer in charge of the dumping disobeyed the instructions given him and consequently lost his life.”

The Wayne County Herald's account of the catastrophe:

“From the Wayne County *Herald*. / **A FRIGHTFUL CATASTROPHE.** *Another Accident at ‘the Pockets’—Six Men Killed and Six Wounded.* / On Saturday last, the 14th inst., between 11 and 12 o’clock, a. m., our town was thrown into a great excitement by the report that another shocking accident had occurred at the ‘Pockets,’ by which several men had lost their lives, and others were horribly mangled. Upon repairing to the scene of disaster, we found the story but too true. Mangled and bleeding we found the dead and dying victims of the fearful catastrophe.—About them were gathered their wives uttering the most heartrending lamentations. Rude litters were being constructed upon which to convey the suffering and dead to their desolated homes. Altogether, it was a scene most frightful in nature, and never to be forgotten. / As we have been called upon to record other accidents at the pockets during the past few weeks, and as a fearful

interest will naturally center in this unfortunate building, we give a short description of its character and dimensions. / 'The Pockets,' is the name given to a mammoth frame structure, 910 feet long, 532 feet wide, 80 feet high, in front, and about 20 feet high in rear, lately erected by the Del. & Hud. Canal Co. as a store-house for coal. It is situated near the West Branch of the Lackawaxen, just above this borough, and is built upon a side-hill which is inclined at an angle of perhaps twenty five degrees. At the foot of the building, the whole structure rests upon a stone wall about ten feet in height; it is also kept together, and in its place, by braces, iron rods, wire ropes, &c. It was commenced in 1860, and we think the frame work of the building was completed in that year. Before the planking was done, however, owing it was supposed to some defect in the foundation, a portion of the building started from its place, and slid some feet down the hill. Workmen have been engaged during the past season, with the aid of powerful machinery, in drawing it back to its original position. This was accomplished by separating the frame in certain places, and replacing the section, one after another. Besides the rejoining and bracing the timbers, a new and stronger foundation wall has been put up under that part of the building which has been repaired. Behind the wall, as we understand it, some filling in was necessary, before the floor of some of the 'pockets,' or divisions of the building could be finished, and it was for this purpose that the car was being run out when the accident happened. At the back of the building, a track is laid the whole length of the structure, from which other tracks branch out over the several pockets. / The particulars of the catastrophe, as nearly as we have been enabled to ascertain them through careful inquiry, are as follows: / The following laborers, viz: Augustus Dapper, Thomas Quinn, Matthew Cully, John Kropf, Martin Hoeft, Michael Caughlan, Thomas Lynhan, Patrick Riley, John Munzer, Joseph Kashmyer, Martin Murry, Patrick Fannon, Barney Gerrity, and Leonard Scheline, with their overseer, John Bauman [emphasis added], started out on one of the tracks with a car load of culm to be dumped behind the foundation wall of one of the pockets. Dapper, Quinn, Cully, Kropf and Caughlan were pulling on a rope ahead of the car, while the rest of the men were pushing. They had got about two thirds of the required distance, when, without any warning, with a tremendous crash, the timbers immediately under the car gave way, and it, with all the men that were pushing, together with Caughlan, was precipitated upon the plank flooring below, a distance of upwards of fifty feet. The rope was jerked out of the hands of the others, and the planks upon which they were standing remaining firm, they were thus saved. / Patrick Riley was killed instantly. He struck first upon an iron rod about half way to the bottom of the building, and then fell headlong upon the bumping beam of the car, crushing his skull and scattering his brains about in the most frightful manner. He was born in Ireland; was 34 years old, and leaves a wife living on Shanty Hill. / Leonard Scheline was killed instantly. His neck and jaw bone were broken.--He was a German, 38 years of age, and leaves a wife living at the Glass Factory. She came with her husband's dinner a few minutes after the accident. / John Munzer, who was literally crushed to pieces, died while being carried home. He was a native of Bavaria, was 29 years old, and leaves a wife living on Shanty Hill. / Thomas Lynhan breathed for about two hours after he fell, but was perfectly insensible until he died. The attending physician gave it as his opinion that his death

was the result of concussion of the brain, and the whole system, though the skull was not fractured, nor were there any bones broken, excepting those of the right hand. Lynham was 37 years of age born in the County of Westmeath, Ireland, and leaves a wife and six little girls, the oldest scarcely eleven years of age. They live on Shanty Hill. / Michael Caughlin lived until eleven o'clock Saturday night, but was senseless from the time of the accident. The base of the skull was fractured, and he died from injury to the brain. He was 35 years old and unmarried. Born in Westmeath, Ireland, and lived on Shanty Hill. / John Bauman fell with his left leg under the car. It was dreadfully mangled, and the *femoral* artery severed. He also sustained severe internal injuries. He lingered in great agony until Tuesday morning, at one o'clock, when he died. He leaves a wife and four children, besides whom, the family of Munker, who was killed a few weeks since by falling from a stoop down town, were dependent upon him for support. Deceased was a native of Germany and 38 years of age. Had been for some years in the employ of the Company, as overseer. / Barney Gerrity is very badly wounded. He was terribly cut and bruised, and has received internal injuries, but may recover. Born in Ireland. / Martin Murry. Arm and ankle badly hurt, and considerably cut about the face. Not considered dangerously wounded.—Attributes the saving of his life to the fact of his falling upon one of the iron rods before he struck the bottom. Is Irish and lives near the Catholic church. / Martin Hoeft, a German living near the toll gate on the Cherry Ridge road, is suffering considerably from the concussion. His whole person is shockingly bruised, but none of his bones are broken. Is in a critical condition. / Patrick Fannon had his jaw bone broken in two places, and was otherwise badly injured. His chin and under jaw were literally split in two. Was born in Ireland; lives on Ladywood Lane. / Joseph Kashmyer, a German 57 years of age, was at first apparently the least injured of all who fell. He got up after his fall, ran up to the track at the back of the building, and there fainted. He is now reported to be failing rapidly. / John Pellenz, another German of about the same age, was employed at the stone work nearly under where the car fell. He was struck by the falling timber, and besides other injuries, had a rib broken. Lives near Esq. Wiseman's office. / Munzer and Scheline were buried on Sunday. On Monday an Inquest was held upon the bodies of Riley, Caughlan, Lynhan, and on Tuesday the same jury not having finished its investigation, Bauman was added. The following verdict was rendered yesterday: / WAYNE COUNTY, SS. / An inquisition indented taken at Honesdale, in the County of Wayne, on the Eighteenth day of December, A. D. 1861, before me, M. A. Bidwell, Esq., Coroner of the county aforesaid, upon the view of the bodies of Michael Caughlan, Patrick Riley, John Munzer, and John Bauman, then and there lying dead—upon the oaths and affirmations of R. L. Seely, Elkanah Patmor, William Wefferling, Patrick Shanly, Thomas Benney and John Smith, good and lawful men of the county aforesaid, who, being sworn or affirmed, and charged to inquire on the part of the Commonwealth, when, where, how and after what manner the said decedents came to their death, do say upon their oaths and affirmations, that, they came to their death at Texas township, in said county, on the 14th and 18th days of December, 1861, by the falling on Saturday the 14th of December, 1861, of a loaded car and portion of the structure known as the 'Coal Pockets,'

belonging to the Delaware and Hudson Canal Company: the *immediate* or *direct* cause of which, was the unfortunate order of one of the deceased requiring the men under his charge, to run out the said car upon an unsafe portion of said structure: and, though this order was given against the express direction of Thaddeus S. Fitch, a superior overseer upon said works, yet in the opinion of this Jury that, the said Company are censurable for not placing a sufficient barrier upon the railroad track at such unsafe places as would have prevented such a casualty. / In witness whereof, &c.” (*Carbondale Advance*, December 21, 1861, p. 2)

Injury at Coal Pockets in Honesdale in 1885:

“Joseph Lutz, a Del. Hud. employe, was seriously injured on Saturday while at work at the pockets in Honesdale. He was employed at one of the slides shoveling coal, when in some manner he fell into one of the chutes, and was carried down and jammed into the outlet, being completely covered with coal. Two loaded cars were about to be dumped upon him, when fortunately his whereabouts were discovered, and he was extricated, unconscious, from his perilous position.” (*Carbondale Advance*, February 21, 1885, p. 3)

One dead, two injured, at Honesdale Coal Pockets:

“The Honesdale *Citizen* of Thursday says: / A little before eight o’clock last Saturday morning, an accident happened at the Del. & Hud coal pockets, which resulted in the death of one man, and slight injuries to two others. The coal pile above the shutes is about fifteen feet in height, from the floor, and the top is frozen to the depth of five or six feet. As the coal is run from the lower part of the pile into the shutes, the frozen portions are loosened with picks. On the occasion referred to, John Tierney was at work on the surface of the pile, loosening the frozen coal. Suddenly it gave way under his feet, and he fell with it. Before he could escape a large mass of the frozen coal fell on him. He was extricated as soon as possible, but life was found to be extinct—his neck and both arms being broken. He lived on Russell’s Hill, on the west side of the borough. He was about forty-five years old, and leaves a wife and five children, the youngest six years old, the next fourteen, and the others grown up. Peter Berline, living on Shanty Hill, and Wm. Vauman, living on Ladywood Lane, who were working farther up the shute, were caught at the same fall of frozen coal. Berline was buried up to his neck, and one ankle was severely sprained, while Vauman escaped with slight bruises. The place where Tierney was working was considered perfectly safe, but the quantity of frozen coal suddenly dislodged was larger than ever before known, and the accident was one that could not have been guarded against under the circumstances.” (*Carbondale Advance*, March 21, 1885, p. 3)

3. The Erie Pockets in South Honesdale—1868

July 13, 1868: 9-mile locomotive line (“Jefferson Railroad”) between Hawley and the eastern outskirts of Honesdale was opened. *Ruth*, p. 59: “As soon as this nine-mile ‘Jefferson Railroad’ was opened to traffic on July 13, 1868, the D&H Canal Company began shipping coal from Honesdale to Hawley by railroad rather than canal.”

December 14, 1863: PCC’s Hawley to Lackawaxen locomotive-powered railroad opened.

Opening of the Jefferson Railroad between Hawley and Honesdale:

“OPENING OF THE JEFFERSON R. R. [between Hawley and Honesdale] –This anxiously looked for and important event became an ‘accomplished fact’ on Monday last. The history of the progress of this valuable enterprise, is too familiar to our readers to require a review at our hands. It now remains for our citizens to reward the untiring efforts of the directors and managers, by an unstinted advancement of every interest of the road. Trains run as follows: Leave 9:20 A.M. and 3 P.M.; Arrive 1:25 P.M., and 6:20 P.M. Notice of calls for passengers, at either of the hotels will receive attention.—*Honesdale Citizen*.” (*Carbondale Advance*, July 18, 1868, p. 3)

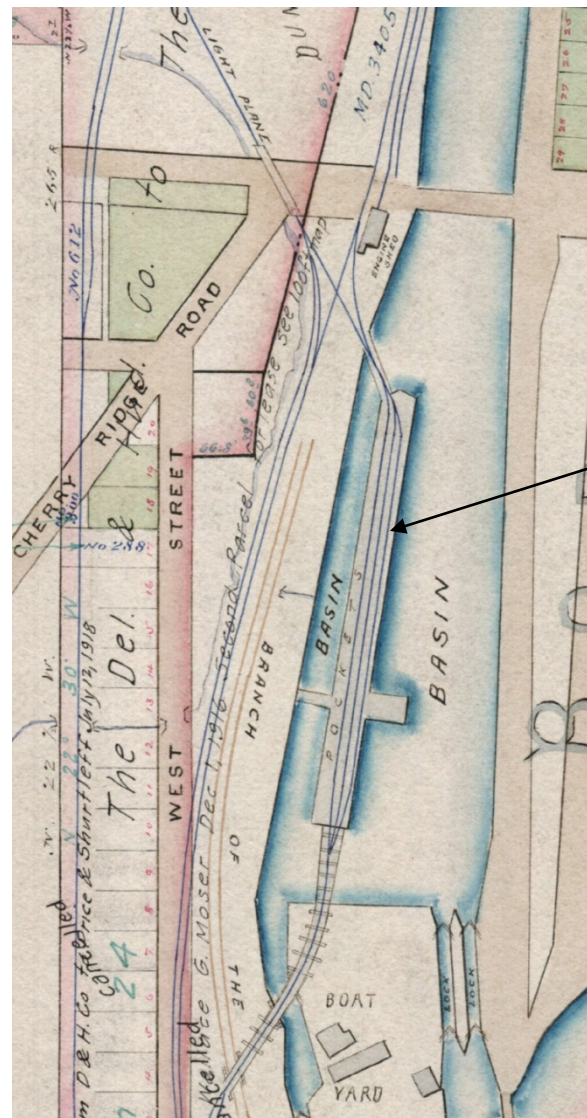
D and H coal by Erie Railroad out of Honesdale, 1868:

"DELAWARE & HUDSON RAILROAD AND CANAL COMPANY.—Since Friday last no coal has been shipped by the Delaware and Hudson Company, on account of the premature closing of the canal. The lower end of the canal is still open. Tomorrow they expect to resume shipping again by rail, and on the 20th of December next they expect to be ready to ship by the Erie Railway, by which time the chutes at Honesdale will be finished." (*Carbondale Advance*, Saturday, December 12, 1868, p. 2).

The Jefferson Railroad from Hawley to Honesdale now open, 1869:

“RAILROAD EXTENSION.—The extension of the Jefferson Railroad [from Hawley to Honesdale] is a fixed fact. The first train 45 cars, containing 12 tons each, left Honesdale yesterday. This improvement will be of immense value to the Del. & Hud. Canal Company, enabling them to compete with their great rivals in the shipment of coal during the winter months, from which, they have been heretofore debarred. The coal pockets are not all in, as yet, nor the tracks all laid, but a few days will remedy this. It was just three months, lacking one day, from the time the first ground was broken until cars passed over a well made road.—*Honesdale Citizen*.” (*Carbondale Advance*, January 23, 1869, p. 3)

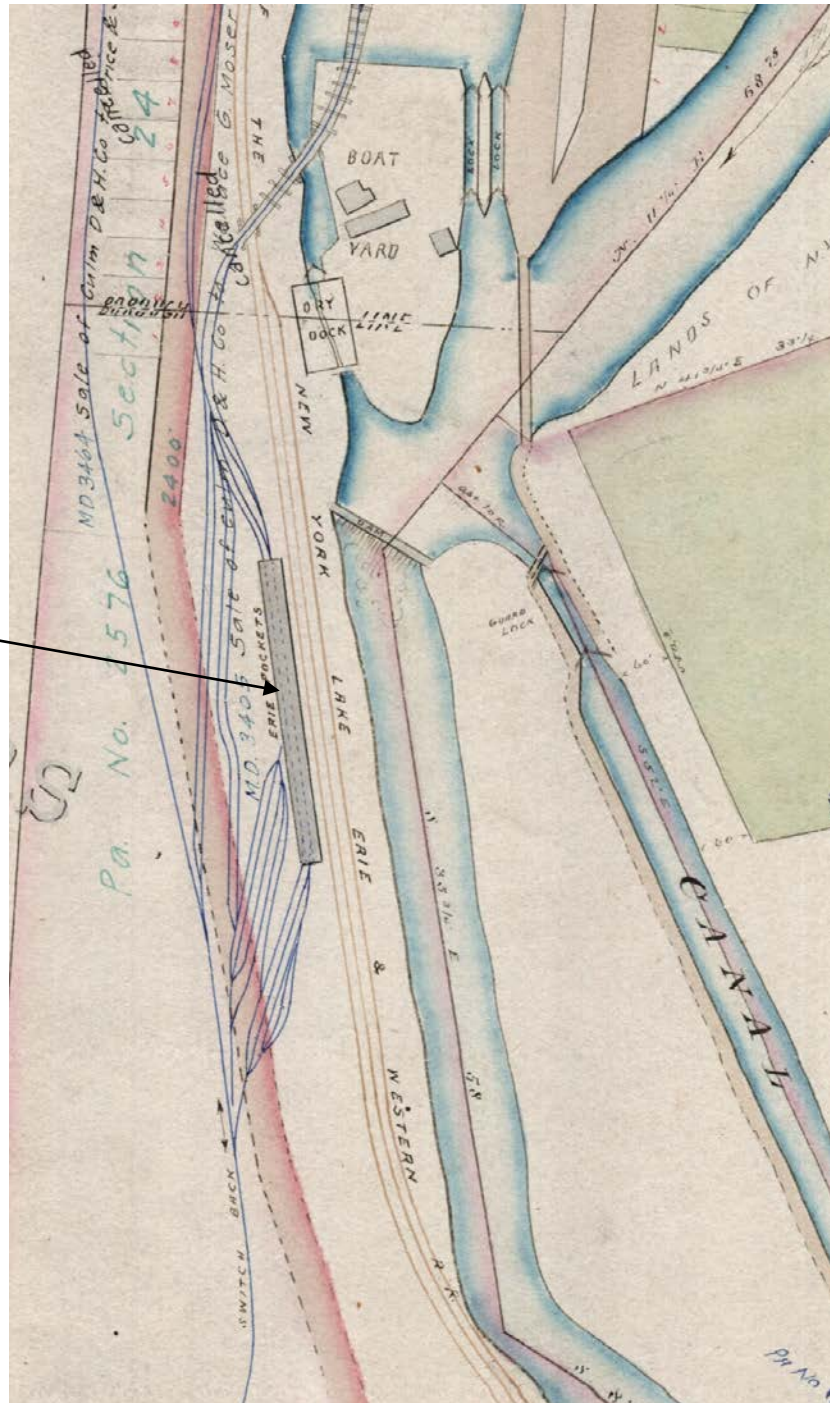
Erie Pockets in Canal Basin:



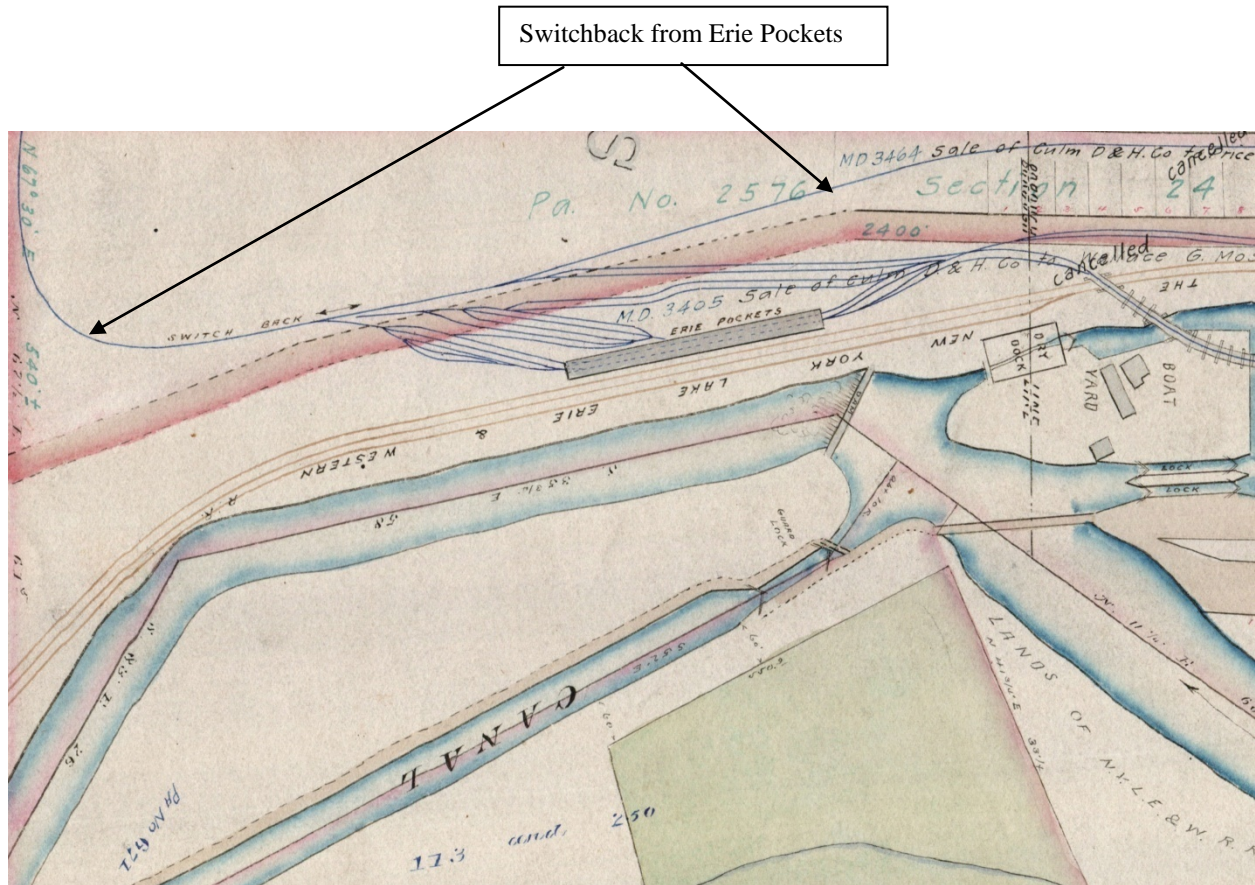
Erie pockets in the
Canal basin, at the
foot of the Union
Light plane

Erie Pockets in South Honesdale;

Erie pockets
in South
Honesdale



Switchback from Erie Pockets



300,000 tons of coal, ready for shipment from Honesdale in the spring of 1889:

"DELAWARE AND HUDSON CANAL. / Middletown, N.Y., March 25.—Navigation opened for the season on the Delaware and Hudson Canal to-day, more than two weeks earlier than last year, when the opening was delayed until April 9. The company has accumulated at Honesdale during the Winter about 300,000 tons of coal, now available for shipment. The company employed last year a fleet of 650 boats, which carried forward to market 930,000 tons. About 50 new boats are added to the fleet this Spring, and if no serious hindrances to navigation occur the season's shipment will reach 1,000,000 tons. / The schedule of rates of freight allowed by the company to its boatmen is the same as last season, and is on the basis of 70 cents per gross ton for delivery at Rondout and 87 cents for delivery in New-York, with the customary demurrages for delays occasioned by breaks in the canal or other interruptions to navigation." (*The New-York Times*, March 26, 1889)

4. Coal storage after the closing of the Gravity Railroad and Canal

When the Gravity Railroad and Canal were closed in 1898-99, the dumping grounds at Honesdale were done away with, making it necessary to find another location in which to dump

coal when the market did not demand the entire amount mined. The new dumping ground was at the north end of the Carbondale Yard on the site that was previously occupied by Anthracite Park.

Anthracite Park will become a coal storage area:

"ANTHRACITE PARK GOING. / Our Race Course Will Soon Give way to Big Coal Piles—Eighth Avenue Crossing. / The changes which the Delaware and Hudson company are making or have in contemplation around the city are so many and important as to claim all attention and discussion. The latest one to become generally known is that anticipated in the LEADER some days ago concerning Anthracite park. / This popular resort will soon be a thing of the past and in its place mountains of coal will rise. It is understood that the Traction company have been notified to vacate on or about June 10 and that the railroad company will then again assume possession. The land was rented to the Traction company for an indefinite period and only upon express agreement that it could be re-entered upon at any time the Delaware & Hudson needed it for their business. / That time has now arrived and the spot that has been the scene of many exciting sporting events will soon be transformed into a sober business place. It is to be used for storing coal—a novelty in this section which has known only culm piles. The park will be much missed by all and its absence will make a considerable difference in the life of Simpson. Its demolition will mean the end of horse racing in this city and as the last meet on the track will occur on Memorial day there will doubtless be a big attendance. . ." (*Carbondale Leader*, May 22, 1899, p. 5)

Some interesting facts about Anthracite Park:

"AT THE PARK. / Preparations Being Made by Traction Company to Remove the Fence—Storing Coal. / Anthracite park which is soon to disappear as an amusement resort was laid out by the Traction company in 1894 at an expense said to be over \$15,000. It was a big city enterprise and much was expected from it. The location was in most respects excellent but the towering hills alongside did much to detract from the gate receipts at each event as they provided elevated seats for spectators free of charge. The park was, therefore, seldom a money maker except in the case of the first races under the auspices of the Gentlemen's Driving club. Excellent baseball games were seen there in 1895 but the paid admissions only met expenses on a few occasions. / The Traction company have had men at work estimating the amount of lumber in the fence which is over a mile long preparatory to taking it down. As the dumping grounds at Honesdale have been done away with it was necessary to select some other point for the purpose and Anthracite park is the most favorably situated. [emphasis added] The company always mine their allotment of coal each year and as the market at times does not demand the entire amount taken out it is necessary to dump a portion till the next busy season ensues. It is probable that one or more steam shovels will be used there for re-loading in the fall." (*Carbondale Leader*, May 23, 1899, p. 6)

Carbondale and the D&H in General at the time of the 1868 Configuration

Basic facts about T. C. Robinson:

"T. C. ROBINSON, carpenter and builder, Cemetery street, established his business soon after he came to Carbondale, in 1871. He was born in Greenfield, in 1843, and married Lois Britton, of Falls, Wyoming county, Pa." (1880, p. 452E)

T. C. Robinson built over 350 buildings in Carbondale:

June 29, 1862: Tylman C. Robinson (born September 7, 1843), lumber dealer and contractor in Carbondale, married, at age 19, Lois Britton of Falls Township, Wyoming County. At the age of 17, Tylman Carpenter learned the carpenter's trade from his uncle, Daniel Carpenter, who was a framer as well as a farmer. "After helping to build two barns, he [Tylman] was able to plan and build the third without assistance, which he did without making a mistake." For two years in the late 1860s, he contracted with the D&H to provide that company with large quantities of lumber. Throughout his career as a lumberman and builder in Carbondale "he has erected three hundred and fifty buildings in the place, among them the new Methodist Church, in which he is an active member and worker, also Odd Fellows' hall, St. Rose convent and the new [in 1897] D. & H. passenger depot. T. C. Robinson was active in municipal affairs "and every good enterprise has had his support. He did much toward raising the money with which to start the silk mill in Carbondale and was largely responsible for the paving of Belmont Street, working for the improvement of the town." His plant and home are situated on Robinson Avenue, named in his honor." (*Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 813-14). From that biographical portrait, we learn that T. C. Robinson's mother's brother, Tyler Carpenter, born July 9, 1797, was a foreman on the Delaware & Hudson Gravity Railroad from Carbondale to Honesdale when that rail line was first installed in 1829.

At the outbreak of the Civil War, Samuel Lingfelter tried to enlist, but was too young:

1866: Samuel F. Lingfelter, who married Abigail M. Cole, of Susquehanna County, was named engineer on the Delaware and Hudson railroad. From the biographical portrait of the man in *Portrait and Biographical Record of Lackawanna County, Pennsylvania*, 1897, pp. 414-415, we learn that he was born in New York City on June 13, 1845, and that he passed his childhood on the family farm near Elkdale, PA, where the family moved when Samuel was four years old. Over the years he worked in various capacities for the D&H—as a mine carpenter, as a fireman, in the carshops—until 1886 when he was named an engineer on the D&H, with residence at 26 Birkett Street, Carbondale. At the outbreak of the Civil War, he tried to enlist, together with his older brothers, but was too young. When old enough, he did enlist and entered Company E, One hundred and Forty-third Pennsylvania Infantry. "During the battle of Gettysburg he was taken very ill and was sent to the hospital, but failing to recover, was honorably discharged on account of disability August 23, 1863, returning to his home at Elkdale. In February, 1864, he had sufficiently regained his health to enable him to again enter the service and this he did, on the

14th of the month, accompanied by a brother, and joining the company of his older brother. Among the many engagements in which he participated were those of the Wilderness, Spottsylvania, North Ann River, Cold Harbor and Petersburg (June 18, 1864). He was in the main line formed in front of Petersburg and remained there until the battle of Weldon Railroad. / . . . [Following a furlough of fifteen days, he rejoined his company and regiment] at Hart's Island, where he remained until June 10 [1865?]. Two days later he was honorably discharged at Harrisburg and then went to Wilkesbarre, where the colonel of the regiment resided. The citizens received the soldiers with the greatest warmth, and tendered them an elegant reception with accompanying banquet and other tokens of regard."

Four of the Lingfelter boys were in the same company in the Civil War:

Samuel F. Lingfelter's older brother, John H., who was born in the city of New York on October 1, 1843 and who came to Carbondale in 1873, was given a D&H engine on June 10, 1872. He was one of the eight children of Samuel F. and Sarah A. (Shaw) Lingfelter of Clifford Township, Susquehanna County, PA. Four of their sons served in the same company, Company B, One Hundred and Forty-third Pennsylvania Infantry, in the Civil War: Charles T. (died from the effects of a wound received while in the army), Jacob M. (captain of Company B, One Hundred and Forty-third Pennsylvania Infantry), John H., Samuel F.

More about John H. Lingfelter:

John H. Lingfelter enlisted in Company B, One Hundred and Forty-third Pennsylvania Infantry on August 11, 1862, when less than 19 years old, and was assigned to the Army of the Potomac. In the portrait of the man in *PABRLCP*, pp. 481-82, we read: "In the engagements of his regiment he took an honorable part and was present at Fredericksburg, Chancellorsville, Gettysburg, Weldon Railroad, Hatchie's Run, and many others. In the battle of the Wilderness, May 5, 1864, he was unfortunately wounded in the leg, and spent one month in the hospital, after which he was granted a furlough of sixty days and returned home. At the expiration of the furlough he had recovered sufficiently to return to the army. He enlisted as a private, but in May, 1864, was promoted to be orderly sergeant, and was serving in that rank when honorably discharged at the close of the war. He was mustered out of the service June 12, 1865. / Two years after his return from the war, Mr. Lingfelter left the home farm and entered railroad work, first as brakeman, then becoming fireman and was given an engine June 10, 1872. . . He is identified with the Brotherhood of Locomotive Engineers. . . and is past commander of William H. Davis Post No 187, G. A. R. By his marriage to Tama (Anderson) Walker, of Clifford Township, Susquehanna County, he has one son, Charles, now employed as foreman in the roundhouse of the Ontario & Western Railroad at the Mayfield yards."

George D. Dimock worked for the D&H for thirty years:

"GEORGE D. DIMOCK, for thirty years an employe of the Delaware and Hudson Canal Company, for whom he worked in 1838, was born in Montrose, Susquehanna county, Pa., February 12th, 1822, and married Sarah Swackhammer, of Washington, N.J." (1880, p. 452B)

More about the Dimock family:

We learn more details about the Dimock family from the biographical portrait of George H. Dimock, son of George D. Dimock, in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897, pp. 236-37: "By his marriage to Sarah Swackhamer, a native of New Jersey, George D. Dimock had four sons and two daughters. . . Benjamin, who is employed as car repairer for the Delaware & Hudson Company. . . William W., foreman on the Gravity road. . . George H. [who] was born in Wayne County, Pa., April 18, 1850. . . In October, 1865, he [George] began to work on the Delaware & Hudson Railroad and for four years was employed as brakeman on the Gravity road, after which he was fireman on the steam road for six years. He was then promoted to his present [1897] position of engineer."

Coal storage areas at Honesdale now filled to capacity:

1862: "The Coal Business. / The repairs upon the Canal of the D. & H. C. Co., are taking more time than was at first expected. It is now expected to be ready early next week. The amount of coal stored at Honesdale has reached its maximum under present arrangements, and the Company has been obliged to discontinue mining and sending it over the Railroad until shipments can be made on the canal." (*Carbondale Advance*, July 12, 1862, p. 3)

William Atkinson was lumber inspector for the D&H:

"WILLIAM ATKINSON was born in England, in 1825, and married Hannah Hurd. He came to Carbondale in 1860, and entered the service of the D. & H. C. Company in 1863. Since July 5th, 1864, he has been lumber inspector." (1880, p. 452A)

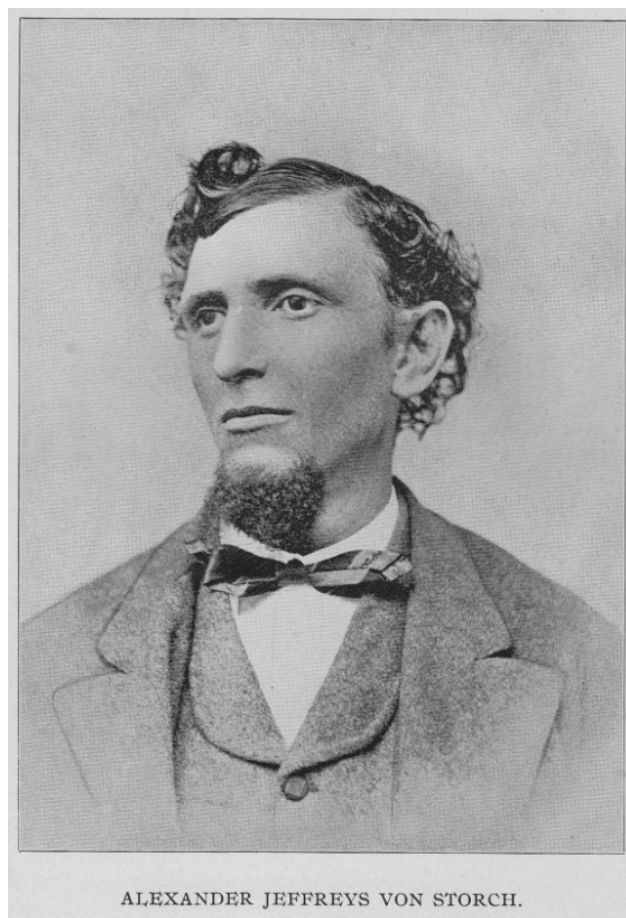
George Rowley was a lumber contractor for the D&H:

"GEORGE M. ROWLEY was born in Addison, N. Y., in 1840, and married Angeline Foster, of Easton, Pa. He served (1861-64) in Company C 6th Pa. volunteers; came to Carbondale in the latter year and was engaged in lumbering until 1868, since when he has been lumber contractor for the D. and H. Canal Company." (1880, p. 452E)

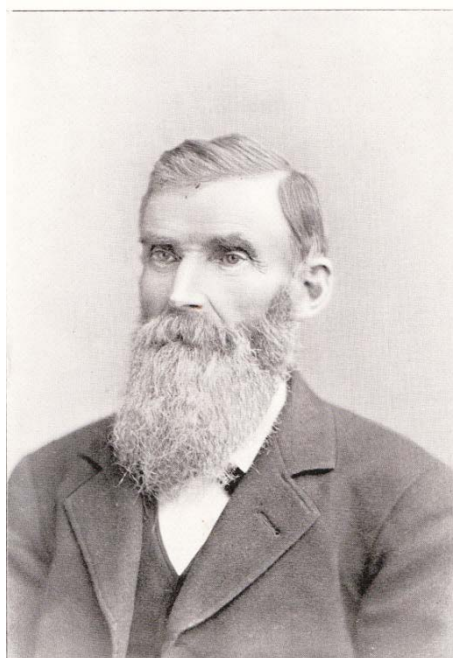
Alexander Jeffreys von Storch participated in many Civil War battles:

1865, January 31: Alexander Jeffreys von Storch (born August 1, 1842, a son of Ferdinand von Storch of Providence) honorably discharged from the Union forces in the Civil War following four years of service, during which he participated in the following battles: Cedar Mountain, Gainesville, second Bull Run, Antietam, the Wilderness, Spottsylvania, North Anna River, Cold Harbor, Petersburg, Weldon Railroad, Petersburg, Hatchie's Run, White Oak Roads, Five Forks, and Appomattox Court House. About the man, we read the following in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, pp. 581-82: "After the war Mr. von Storch was employed by the Delaware & Hudson Company as fireman at Leggett's Creek shaft, but during the last year he served as engineer. For five years afterward he was stationary engineer at Carbondale in the employ of the same company [very probably at one of the engines on the Gravity Railroad]. On his return to Scranton he was employed in the Delaware & Hudson machine shops."

Here is the likeness of Alexander Jeffreys von Storch that is given on page 580 of *Portrait and Biographical Record of Lackawanna County Pennsylvania*:



Godfrey von Storch. Born at the family homestead in Providence, PA, in 1821, the son of Henry L. C. von Storch. "He was superintendent of the sinking of the von Storch shaft, now owned and operated by the Delaware & Hudson Company. Afterward he was superintendent of the sinking of the Leggett's Creek shaft, putting in the brick and stone work. About 1866 he resigned his position with the Delaware & Hudson, and from that time looked after his various interests." He died December 3, 1887. Here is the photograph of Godfrey von Storch that is given on page 608 of *PABRLCP*:



GODFREY VON STORCH.

Snow interrupts service in 1868:

"The Last Storm. / "Storm after storm rises dark o'er the way." / We have been chronicling storms in almost every issue of our paper, during the season. An unprecedented amount of snow has fallen. Those that have kept a record say the total amount is now seventy inches. The last one, on Monday of this week, was far the most severe of the season. The snow has piled terribly on all sides of us. No Passenger Cars ran to Scranton on Monday, and but one trip on Tuesday. No coal cars were run to Honesdale until Thursday afternoon. The Stage from that place made its first appearance here for the week on Thursday at 5 o'clock P. M. The Stage from Clifford

reached here first for the week on the forenoon of Thursday. /Our side walks in town are in the worst condition even known. But few lot owners have cleared the snow from their walks, and serpentine paths over and around the drifts are the only means of travel. Many of them are so narrow and crooked that a sober man can scarce follow them. This last storm, added to all the previous ones, has seemed too much for some of our people, and they seem disposed to sit down, resigned, without an effort to make paths. They assert that it is of no use—they have been making paths until they are tired of it. This week completes eighty-eight days of sleighing.” (*Carbondale Advance*, Saturday, March 7, 1868, p. 3)

D and H capital stock to be doubled in 1868:

"DELAWARE & HUDSON CO.--The Delaware & Hudson Canal Company proposes to double its capital stack, making it \$20,000,000. A special meeting has been called for May 12th, to obtain the consent of the shareholders. If the authority be given, 50,000 shares, or one share for every two now held by the stockholders, will be issued immediately, and which 60 per cent. will be called for in installments during the present year; and the remaining 40 per cent, or \$2,000,000, will be credited as paid to represent that amount of undivided earnings expended in improvements, purchases of lands, and in providing a necessary increase of working capital. The amount to be called in (\$3,000,000) is required to pay for the recent large purchase of coal properties in the neighborhood of Wilkes-Barre. The purchases will lay a solid basis for an important and needed extension of the company's operations, and the board feel the strongest confidence that they will contribute largely to the future prosperity of the company. The remaining 50,000 shares, if the issue be authorized, will be disposed of hereafter, from time to time, as, in the judgment of the board, the interests of the company and the attainment of the objects of its charter may require.--*Philadelphia Press*." (*Carbondale Advance*, Saturday, May 16, 1868, p. 3)

1868-1871

An excellent summary statement in *Hollister*, pp. 179-184:

Chapter XXII of *Hollister*: "A Southern outlet for Lackawanna coal was found in 1869 by virtue of a satisfactory arrangement made with the Northern Central Railway Company to transport coal from Wilkes-Barre to Baltimore, while a Northern one opened only through the caprice of a temporary railroad lease, easily respected and as easily broken. / It was not considered by the Management as a part of wisdom to trust wholly to a thread so fragile, or to the frozen and often fractured Canal for distributing anthracite to the North, or East or West, when a way, always independent and governable, could be commanded by reasonable purchase. Acting from this standpoint, the Company made in February 1879, a perpetual lease of the property and franchises of the Albany & Susquehanna Railway Company, 'at an annual rent of \$490,000 or 7 per cent

upon its capital, and bonded debt \$7,000,000. As a trunk line running east and west, the possession of this road, it is confidently believed, will greatly strengthen our position, and open new and growing markets for our coal. It had become evident to the Managers that, to meet the rapid increase in consumption east and north of the mines, transportation facilities would require to be largely extended, either by the enlargement of the Canal—involving a large expenditure—or by the possession or control of a railroad line running nearly parallel therewith. The enlargement of the Canal would give increased capacity only, while the possession of the Albany and Susquehanna Railroad gives, in addition, markets that are practically closed to the canal, a much-needed winter communication, and protects us from competition that might under possible combinations, have seriously affected the value of our present improvements. / The importance of this road has long been appreciated by the managers, and was regarded in the early stages of its construction as an avenue that would eventually become an important element in the growth and business interests of this company; and with a view of becoming identified with this enterprise, \$500,000 of the second mortgage bonds were subscribed for some years ago, and are still in our possession.' (Managers Report 1870) / During the year nearly \$3,000,000 was expended in improvements and in constructing a railroad connecting the mines with the Erie Railway and in building a locomotive road between Carbondale and Scranton. This large expenditure of money half of which was expended upon the valley Railway, greatly aided a large class of laboring men, otherwise idle, because of a strike. / Throughout the entire Northern Coal Field, mining was wholly suspended from the middle of May 1869, to the middle of September—a period the four months of the boating season and yet nearly two million tons of Lackawanna coal was carried to market by the Company during the year. / If the good effects of the war in stimulating the extraordinary yet artificial demand for coal that it did, and in beguiling unneeded labor to the coal fields that now creates its own embarrassment, were once acknowledged by all, then it must be confessed that whatever apparent advantage was gained by its existence at the time, has been thrice counterbalanced by subsequent strikes, stops and suspensions that have followed each other and that must inevitably follow while the means for producing coal are so far in excess of its demand and consumption. / During the war or at its close, the productive capacity of the mines of the Company was about ten thousand tons per day. Should an exigency arise, they could easily turn out at present, ten million tons per year, while the combination of coal men apportioned but 1,545,300 tons for this Company, as its portion of the joint supply, to carry to tide water, during the year 1876. This pro rata arrangement however, does not and did not affect its Northern or other inland shipments. / About the first of December all the coal producing Companies of this region ordered a reduction of wages. This resulted in a strike, known as the great Strike whose baneful influence still shadows bankrupt merchants with hopeless indebtedness as a reward for trusting in credit. All mines but private ones for local use, were silent and idle. The immediate cause of the strike was the reduction of wages of miners and laborers; the recent cause a great excess of mine labor. The plain truth is that, for the amount of coal now demanded, there are too many miners and too many mines for its production. When the

fresh agricultural grounds of the West or the warmer acres of the South, invite the personal and permanent attention of at least one-third of our miners and laborers, the remainder can find remunerative employment and prosperity will then return to enrich and enliven the banks of the Lackawanna. / The Board of Managers made the following report of this strike to the Stockholders: "The causes which led to this strike, are briefly these. During the war the rapid increase in the demand for coal stimulated production beyond precedent, forced higher rates for mining than was paid by any other branch of industry, and attracted to the mines a larger number of men than could be profitably employed when business returned to its natural channel. / To maintain the then current high wages, the miners formed an Association, which in a short time, embraced the entire Anthracite region, and in the year 1869, resolved that they would not [I think the word "now" was intended.] determine the production of the mines and the value of coal to the consumer. This new and extraordinary claim was conceded by a majority of the producers, but was successfully resisted by the three Northern Companies. They were compelled, however by the action of the other regions, to make larger advances in wages than the business would warrant. / With the view of bringing their business again to a proper level, and of equalizing the rates paid for labor with the other regions, the action of November was determined upon. The rates agreed upon were carefully considered, were fully equal to those of other coal producing regions, and were sufficient to yield larger average wages than can be obtained in any other branch of industry in the country. Nothing has occurred since the strike was inaugurated to change the views or the policy then entertained and determined upon. / The system of suspension inaugurated by the men [emphasis added], for the avowed purpose of curtailing the production, is alike disastrous to the Company, to the miner and to the consumer, as no temporary advance in the price of the product will compensate either the operator or the miner for the great losses entailed during periods of suspension, while the consumer bears the burden of enforced high prices and the risk of having the supply cut off at any moment. / The only safe remedy for over production is the natural law of trade, and it is the belief of the Management that if the suspensions of the last two years had not taken place, and a uniform and steady movement had been maintained, the consumption of 1871 would have been equal to the productive capacity, at prices fairly compensating operator and miner and furnishing the consumer with coal at moderate and uniform rates. / The only question involved in the issue is whether the property shall be controlled and the policy of the Company determined by the owners, or whether it shall be committed to the care and direction of an irresponsible organization, and in determining this question, the managers are strong in the belief that the stockholders can have but one opinion. / By order of the Board, / THOMAS DICKSON, President. / In 1871 the Lackawanna & Susquehanna Railway running from Susquehanna to Nineveh, a distance of twenty miles, was completed; a third rail for the use of the narrow gauge [sic] coal cars, was laid on the Albany and Susquehanna Road, road, thus completing a continuous and direct railroad line from Wyoming Valley to Albany. / Another step towards Canada was taken by the Company, May 1, 1871 in getting a perpetual lease of the property and rights of Rensselaer and Saratoga Railroad Company. The absence of President Dickson for a year, in his tour around the world in 1871,

altered no prearranged measures of development or delayed pulling the latch strings of Canadian doorways. / COE F. YOUNG, General Manager of the Delaware & Hudson Canal Company's Railways, living in Honesdale, Pennsylvania, a man of ministered deportment, of good sense and quick perception, thoroughly educated in the art of constructing and managing railways, enjoyed the high consideration then that he retains yet for the possession of qualifications requisite in the successful management of railroads, and was thus enabled to discharge the double duties of President and Manager with becoming tact and discretion. It was during this year that the Company proposed to extend this last acquired railway along the western margin of Lake Champlain and nothing but a delay in getting the right of way, postponed work upon it until 1872."

1869: **Silas A. McMullen** named Assistant Superintendent of the Pennsylvania Division of the Delaware & Hudson Railroad. Here is the likeness of Silas A. McMullen that is given on page 464 of *Portrait and Biographical Record of Lackawanna County, Pennsylvania*, 1897, p.464:



Here is the biographical portrait that is given in that same volume, pp. 465-466:

"SILAS A. McMULLEN, assistant superintendent of the Pennsylvania Division of the Delaware & Hudson Railroad and a well known citizen of Carbondale, was born in Clinton Township, Wayne County, Pa., October 9, 1836. His father, Silas K., who was born in 1809 in Mt. Pleasant Township of the same county followed the trade of a carpenter and as early as 1827 was in the employ of the Delaware & Hudson Canal Company in the construction of the original Gravity Railroad from Carbondale to Honesdale. Later he was engaged in the lumber business. From 1849 until the time of his death he was employed in various capacities with the Delaware & Hudson, but in 1860 was accidentally killed while running a stationary engine on the Gravity road. He possessed a quiet and retiring disposition, and those who knew him best found him to be a man of true sterling worth. He had several brothers, all of whom served in the Civil War. / The McMullen family is of sturdy Scotch ancestry and its members have born an honorable part in their respective generations, their principal occupation being agriculture, especially during the early history of this country. The great-great-grandfather of our subject was one of the pioneer settlers in the now famous Wyoming Valley. Our subject's grandfather, James, was born in Luzerne County Pa., and was the son of a Revolutionary soldier, who was in active service at the time of the Wyoming massacre. The mother of our subject was in maidenhood Lydia Conklin and was born in Wayne County, Pa., the daughter of Jacob Conklin. His ancestors came from Germany to the United States not long after the Puritans and in later years were prominent in the Baptist Church. She was eighty-four years of age September 1, 1896, and is wonderfully well preserved, with a brightness of intellect and energy of disposition not always possessed by women many years her junior. She makes her home with a daughter in Minnesota, but at this writing is visiting her sons in Carbondale. / The subject of this sketch was the eldest of six children, all of whom are living except a sister who died at ten years. The others are Mrs. Elmira Thompson, who resides in Tacoma, Wash.; Angeline, wife of George Berry, a farmer living in Lanesboro, Minn.; William J., superintendent of the Gravity Railroad; and Charles, a member of the Lackawanna Hardware Company of Scranton and a very successful business man. Our subject had the advantage of a high school education and carried on his studies until he was fifteen years of age, when his health broke down. After regaining his strength, he became connected with the Delaware & Hudson Railroad under his father and, with the exception of the four years from 1865 to 1869 when he was engaged in the mercantile business, he has since been in the employ of this company. Since 1869 he has filled his present position and under his supervision the locomotive road from Scranton to Carbondale was built. He has guarded well the interests of the company, has been a faithful man in his responsible position, and has the confidence of his superior officers as well as of the men under his direction. / In addition to his connection with the railroad, Mr. McMullen is interested in various other enterprises. He is a director in the Miners & Mechanics Bank, since 1876 has been president of the Crystal Lake Water company, with which he has been connected since its organization. He also has large interests in West Virginia. In the upbuilding of Carbondale he has always manifested a deep concern. His connection with the Carbondale board of education covers a period of eighteen years, during a large part of which time he was its president. He devoted his time and energy to securing for the city a first-class school system, and to him, more than any other man in the place, Carbondale is indebted for its excellent schools and the many fine school buildings that

now adorn it. While he met with much opposition in this work, he persisted in his progressive plans and did not retire from the school board until he had accomplished what he started out to do. Though quiet and unassuming, he has the indomitable will characteristic of his race and to this trait his success is largely due. / Fraternally for many years Mr. McMullen has been a member of the Masonic order and has filled the leading offices, having been master of the blue lodge, high priest of the chapter and commander of the Knights Templar. His first marriage took place in 1860, when Miss Sarah P. Miller became his wife. She died four years later and her only child passed away when young. In 1866 he married Miss Louisa A. Hubbard, of Wayne County. Three children were born of this union, but two died in childhood. The only surviving member of the family is Silas A., Jr., a bright boy of thirteen years. Mr. and Mrs. McMullen are members of the Episcopal Church and are interested in the work of that denomination, by the members of which they are held in high regard. They own and occupy a comfortable residence in Garfield Avenue." [emphasis added throughout]

"SILAS A. MCMULLEN was born in Clinton, Wayne county, Pa., October 9th, 1836, and married Louisa A. Hubbard, of Wayne county, Pa. He came to Carbondale February 22nd, 1869, and since March 1st following has been assistant superintendent of the Pennsylvania division of the D. & H. Canal Company's railroad." 1880 (452D)

March 1, 1869: **Coe F. Young** appointed general superintendent of the D&H. (For a time the office had been abolished; when Thomas Dickson was elected VP on January 16, 1866, he was directed to continue to discharge the duties of general superintendent.)

"Mr. Young had been superintendent of the canal since 1864. He was untiring in activity, a strict disciplinarian, and he was to become, within a few years, general manager of the company." *COP*, p. 231:

Biographical portrait of Coe F. Young in *Mathews*, pp. 249-50:

"Coe F. Young, for many years the general manager of the Delaware and Hudson Canal Company, is a descendant of an old English family, of Scotch extraction, whose representatives emigrated to this country at an early period in its history, and settled in Connecticut, where they became identified with the pioneer development of that State. . . [Coe F. Young] was born near Mount Hope, Orange County, N. Y., May 15, 1824. His early education was obtained at the district schools of his locality, and was completed at the Kingston (N. Y.) Academy, and the seminary at Amenia, Dutchess County, N. Y. When only thirteen years of age he began the performance of the duties of life by driving on the tow-path of the Delaware and Hudson Canal Company, as so many of our successful and prominent men have done. Before he attained his

majority he served as a clerk in the store of Thomas W. Cornell & Co., at Eddyville, Ulster County, N. Y., and subsequently with their successor, Martin J. Merchant. Soon afterward, the Delaware and Hudson Canal Company began enlarging the canal, and the construction of the Erie Railway was undertaken. With the ambition of youth, and the energy and business sagacity that has since characterized his life, he resolved to profit by the opening trade and removed to Barryville, N. Y., where, in connection with Calvin P. Fuller, he established a store, the firm doing business under the name and style of Fuller & Young. In the spring of 1852 he bought of Major Cornell a half-interest in the canal freight line between New York and Northeastern Pennsylvania. The firm of Thomas Cornell & Co. was organized, and Mr. Young removed to Honesdale, Pa., where he has since resided. After five years, he became, by purchase the sole proprietor of the line, and operated it alone for seven years longer. At that time the transportation facilities of the Delaware and Hudson Canal Company included only the canal and gravity railroad, and the mines of the company were only being moderately worked. On January 1, 1864, at the solicitation of George Talbot Olyphant, president of the company, and Thomas Dickson, general superintendent, Mr. Young entered the service of that company as superintendent of the Canal Department; and in 1865 the Rondout and Weehawken Department was placed under his supervision. In 1869 Mr. Olyphant resigned as president of the company and was succeeded by Mr. Dickson. Mr. Young was then made general superintendent, and, after three years, became general manager, a position in which he served until the death of Mr. Dickson, in July, 1884, when he was elected vice-president and general manager of the company, Robert Olyphant being then, as now, the president. This responsible position was occupied by him until October 1, 1885, when he resigned, and Le Grand B. Cannon was made vice-president, and his son, Horace G. Young, general manager. / . . . In 1863 he [Coe F. Young] purchased nearly ten thousand acres of land a few miles north of Honesdale, including the tannery property at Tanner's Falls, which he still owns. He is the president of the Albany and Susquehanna Railroad, having succeeded James R. Ramsay, and vice-president of the Cherry Valley and Susquehanna Railroad, and of the Schenectady and Waynesburg road, both under lease to the Delaware and Hudson Canal Company. He has been president of the Honesdale National Bank for several years. He is a man of strong convictions, positive in his nature, of rare executive ability and of sterling integrity. It is not improper to say that the rapid development and successful manipulation of the affairs of the Delaware and Hudson Canal Company, in this section, is due to his broad and comprehensive management, and is the result of his conscientious and intelligent performance of his official duties. During his management the productive coal capacity of the company has been increased from eight hundred thousand tons annually to four and one-half millions, and the railway appendages of the company have all been added. By close and attentive reading and study he has acquired an education far in advance of what his school advantages afforded, and has become a thoroughly self-educated man. . . He married, January 17, 1849, Miss Mary A., daughter of Peter Cornell, of Rondout, New York, and has four children living. Of these Cornelia Alice is the wife of George W. Barnes, now of Colorado; Horace G., by profession a civil engineer and a graduate of the Rensselaer Polytechnic Institute of Troy, N. Y., is the general manager of the company, and resides at Albany, N. Y.; Edwin is a graduate of Yale College, and of the Columbia College Law School, New York, and is the attorney of the Delaware and Hudson Canal Company, living at Albany; and Mary Augusta, is the wife of Joseph B. Dickson, of New York, youngest son of the late president Dickson."

Here is the obituary of Coe F. Young that was published in *The New York Times* of March 23, 1889: "**COE F. YOUNG.** / Coe F. Young of Honesdale, Penn., for many years General Manager and Vice-President of the Delaware and Hudson Canal Company, died yesterday morning of pneumonia at Thomasville, Ga., where he had gone in search of health. Mr. Young was born in 1824. Early in life he took an active part in business and became the proprietor of a line of freight and passenger packets running on the Delaware and Hudson Canal. In January, 1864, he entered the service of the canal company as Superintendent of the canal department. In January, 1869, he was made General Manager of the canal and railroads of the corporation. He was interested in the Honesdale (Penn.) National Bank, having filled the office of President for many years. / About three years ago he retired from active participation in the affairs of the canal company, and his son, Horace G. Young, was selected to fill his place as Vice-President and General Manager. His wife, who was at Thomasville with him when he died; his sons, Horace G. and Edwin, and two daughters, one of whom is Mrs. Joseph B. Dickson of this city, survive him."

Here is a copy of the engraved photographic likeness of Coe F. Young that is given facing page 249 in *Mathews*:



A handwritten signature of Coe F. Young in cursive script. The signature is written in dark ink on a light background. The name "Coe F. Young" is clearly legible, with a stylized flourish at the end.

Coe F. Young and Thomas Dickson:

In an article titled "EARLY DAYS OF THE D. & H. / How the Company Came Into Existence—About Two of Its Prominent Pioneers" that was published in the December 12, 1898 issue (p. 6) of the *Carbondale Leader* we read of the circumstances that led to the life-long friendship between Coe F. Young and Thomas Dickson.

"EARLY DAYS OF THE D. & H. / How the Company Came Into Existence—About Two of Its Prominent Pioneers / . . . COE F. YOUNG. / 'Any one who has been much in Orange county, New York, must have noticed how many citizens of that locality have been and are christened Coe F. Many years ago the most conspicuous person in all that country was Coe Finch. In Coe Finch's day a well-to-do and much respected farmer named Young lived just over the Sussex county line. Following custom and inclination, farmer Young named his first son Coe F. Sixty years or so ago this son was a lad perhaps fifteen years old. He was unusually bright, but his bent was mischievous. He was inclined to idleness and restlessness. He had a genius for sleight-of-hand tricks, and for imitating the songs of birds and cries of animals, and for ventriloquism. These gifts and his uniform good nature made him a favorite everywhere in that rural vicinage, especially with the good housewives and the young people. The lad particularly like to visit at farmer Durland's at Minisink, but farmer Durland did not think his presence was good for the boys and the farm hands, so one day when the boy turned up the old farmer told him bluntly that he couldn't stay. This grieved the farmer's wife greatly, for the boy was a great favorite of hers, and she told him to go and hide in the barn. Mrs. Durland carried good things out to him and fed him like a prince for two days, when farmer Durland discovered him. Then the farmer threatened to flog him within an inch of his life. / **THOMAS DICKSON.** / This was a great humiliation and he turned his head toward the west and walked. He did not stop at the Young farm, but walked clear across Sussex county to the Delaware river, and kept on through Pennsylvania, crossed into New York state at Port Jervis, struck the towpath of the Delaware and Hudson canal and followed that. He had walked several miles on the towpath, when he was taken on board a canal boat bound for Honesdale. On this boat was a Scotch family, recently landed in America, on their way to the new coal country. One member of the family was a boy about the age of the wanderer from New Jersey. By the time the boat reached Honesdale the two boys had become fast friends. The destination of the Scotch family was Carbondale, which, like Honesdale, had been called into existence by the operations of the canal company. The father of the family was a skilled mechanic and was to go to work in the company's machine shops at Carbondale. The boy Young remained in Honesdale and procured work on the canal. It was not

long before he had a boat of his own and his ability attracted the attention of the magnates of the company and other leading men. Then he was placed at the head of the freight department of the Canal company, and on the death of Russell F. Lord, general superintendent of the canal, Coe F. Young succeeded to the place. / "There is a tradition that the Scotch boy whose acquaintance Young made on the canal boat became a mule boy in the company's coal mines at Carbondale. He did drive a mule in the mines, but it was not compulsory, and it was only for a day or two, when his superior intelligence gained him a good place in the company's employ, and his advancement was so steady that he at last became president of the company in whose mine he had driven a mule. His name was Thomas Dickson. Soon after Dickson became president of the company his old towpath friend, Coe F. Young, was made vice-president and general manager. It was the sagacious and aggressive policy of these two men that secured to the canal company the gigantic railroad system of central and northern New York that it now owns, and the possession of which makes it possible for the company to abandon the canal." (*Carbondale Leader*, December 12, 1898, p. 6)

1869 D&H Annual Report:

"Delaware & Hudson Canal Co. / MAY 11, 1869.—The Board of Managers herewith submit to the stockholders the annual statement of the business of the Company for the year ending March 1, 1869, showing a net profit of \$1,668, 953.26, or about 11 ¼ per cent. on the present capital stock. This result will not be regarded as unfavorable, in view of the fact that much the larger part of our production was sold at low prices early in the season, and that the business of the year was heavily taxed for interest on their recent purchases of coal properties, from which a corresponding income could not be so soon obtained. / In the month of September last, a contact was made with the Erie Railway Company by which they engaged to construct a railway from Carbondale to their main line at Susquehanna, to be completed on or before the first day of June, 1870, and thereafter to transport coal for us on favorable terms from our mines to Rochester and Buffalo. [emphasis added] In the same contract, a provision was included which will enable us hereafter to bring a supply of coal during the winter months from Honesdale to Weehawken dock, as well as to occupy our proper share of the local markets on the line of the Erie road. In consideration of the services to be thus performed, we have agreed to purchase from the Erie Company \$1,500,000 of the first mortgage bonds of the Boston, Hartford, & Erie Railway Company, to be guaranteed by the former, and to pay for 90 percent of their par value, as fast as an equivalent amount shall have been expended by the Erie Company in building the roads in question. / The construction of an easy line from Susquehanna to Nineveh on the Albany and Susquehanna Railroad, a distance of 20 miles will give us the control of the shortest and in every respect best connection between the anthracite coal fields and the numerous and growing towns on that important road. A satisfactory arrangement for the transportation of our coal was made some years ago with the Albany and Susquehanna Company, and the Board are of the opinion

that steps should be taken at an early day to secure the valuable market thus brought within our reach. The cost of the road which it will be necessary to build for this purpose [the L&S] is estimated at \$650,000. / Very considerable and costly changes will need to be made in our road between Carbondale and Scranton, to provide for the increased tonnage to be passed over it, when the western and northern connections already mentioned shall have been completed. It will probably be found that the most effectual, and in the end, the most economical, mode of accomplishing this object will be to do away with our present gravity system between Carbondale and Olyphant, and to build in place of it a double track locomotive road, adding a second track to the road already constructed from Olyphant to Scranton. / A large addition to the capacity of our road between Carbondale and Honesdale is also much needed. With our present facilities, our maximum tonnage which we are likely to reach during the present season will not exceed two millions tons, while to fill our canal, to supply the coal to be carried eastward over the Erie road, and to meet engagements into which we have entered with other parties for a transportation of coal, we should be in a position to move with ease over this portion of our road not less than three millions of tons annually. The improvements in our line of road thus indicated can hardly be effected for a smaller sum than \$1,500,000, making a total of nearly \$3,500,000 required for works already in progress, or which must soon be commenced, unless we are prepared to yield to bolder rivals the large and profitable markets now open to our enterprise. The increased annual charge upon our business growing out of the proposed outlay will not exceed the net sum of \$140,000.

<i>Tolls received on the Delaware and Hudson Canal and Railroad.</i>			
1830.....	\$16,422.44	1850.....	\$97,999.15
1831.....	20,554.64	1851.....	158,441.96
1832.....	28,717.51	1852.....	293,174.67
1833.....	27,004.58	1853.....	578,479.83
1834.....	36,946.07	1854.....	587,349.52
1835.....	41,976.82	1855.....	652,362.94
1836.....	45,154.73	1856.....	583,787.86
1837.....	44,532.42	1857.....	435,198.44
1838.....	40,328.38	1858.....	397,698.11
1839.....	40,095.26	1859.....	811,597.79
1840.....	85,450.46	1860.....	897,667.99
1841.....	89,388.19	1861.....	367,958.56
1842.....	83,694.92	1862.....	316,876.97
1843.....	80,996.53	1863.....	954,822.67
1844.....	83,525.61	1864.....	1,213,570.46
1845.....	25,880.92	1865.....	201,679.38
1846.....	26,068.65	1866.....	118,482.93
1847.....	33,971.34	1867.....	76,530.05
1848.....	46,348.54	1868.....	89,846.57
1849.....	34,817.95		
			<hr/>
			\$8,260,556.53

Merchandise and provisions transported during the year 1868, 21,253 tons; plaster, 75; cement and cement stone, 84,142; tanners' bark, 830; leather and hides, 5,516; stone, brick, and lime, 24,752; iron ore, pig iron, etc., 5,734; mill stone, 237; staves, lath, etc., 863; manufactures of wool, 1,503; glass and glassware, 1,670; charcoal, 10; bituminous coal, 472; wood, 20,092; hemlock shingles, 10; ship timber and railroad ties, 3,256; hemlock lumber, 12,613; pine and bass wood, 1,241; hemlock, 21,471; anthracite coal, 1,640,118.—Total tons, 1,845,958." (*Carbondale Advance*, July 17, 1869, p.2)

The Erie will ship D&H coal during the winter months when the canal is closed:

In 1868, the D. & H. entered into a contract with the Erie Railroad to ship D. & H. coal to the Hudson during the winter months when the canal was closed. At this time, the D. & H. also entered into new contracts or leases with many railroad companies (mostly in New York state and in New England) to ship D. & H. coal. After 1872, the D. & H. no longer published annual statistics on D. & H. canal traffic.

John Power injured his right leg by falling under a car at the pockets:

1869: "John Power, an employee of the Company, at work at 'the pockets,' had his right leg bruised and cut, on Saturday, by falling under a car." (*Carbondale Advance*, April 17, 1869, p. 3)

D&H officers and the state of affairs, 1869:

"THE DELAWARE AND HUDSON CANAL CO.— . . The following change of officers of the Delaware & Hudson Canal Company goes into effect on the first of March: / Thomas Dickson, of Scranton, becomes President, in place of G. T. Olyphant; Coe F. Young, general Superintendent; A. H. Vandling, Superintendent of Rondout department; A. M. Atkinson, of Ellenville, Superintendent of Canal Department; J. B. Fitch, of Hawley, continues as Superintendent of the Pennsylvania section, including the Delaware aqueduct. / Mr. Atkinson will remove to Honesdale. A thorough repair of the docks &c. here is being made, and workmen are now cleaning out the basin. The canal will probably open by the 15th of March. [emphasis added] / The Delaware & Hudson Canal Company are now shipping coal via Honesdale Branch and Erie railroad to all points.—*Wayne Citizen*." (*Carbondale Advance*, February 27, 1869, p. 3)

Black Friday, September 24, 1869:

A day of financial panic on Wall Street caused by the manipulation of Jay Gould and James Fisk. Gould forced gold up to 162. Thousands of gold speculators were ruined.

The financial system of the nation had not yet gone back to a gold basis, but gold had to be used in certain financial transactions, especially in international trade. There was thus a market in the metal which commanded a premium above paper money.

Gould and Fisk were determined to corner the gold market. In an attempt to corner the gold market, Gould and Fisk tried to keep President Grant from selling government gold, and assured the public that they had been successful. However, Grant ordered the sale of \$4,000,000 in gold, forcing the price down. Panic reigned. Hundreds of innocent commercial firms went bankrupt.

Twelve thousand tons of coal shipped to market in a single day:

"**The Del. & Hud. R. R.** / Coal never moved more briskly over the D. & H. R. R. than during the present week. Some daily shipments have surpassed any previous figures. This will do something to compensate for the long suspension, but the total must at the close of the season fall below that of last year. The present decrease it will be seen exceeds 420,000 tons. This at the present rate of production will be considerably reduced, but not overcome." / The *Scranton Republican* of Friday has the following: / Yesterday the Delaware and Hudson Canal Company shipped to market *twelve thousand tons* of coal, the largest amount ever shipped by that company in any one day. During ten hours of the same day, hauled *two thousand cars* over the mountain. This was also unprecedented. Whose turn it is now for the next big coal story?" (*Carbondale Advance*, Saturday, October 2, 1869, p. 3)

1870: August 2: the great tornado in the Lackawanna Valley

From the mines to Canada on D&H Rail:

"Ever since DeWitt Clinton led the Erie Canal across his native state in triumph, the deep mineral valley of Lake Champlain, once reddened by the blood of Indians, French and Englishmen fighting for its possession, had looked in vain for a rail communication with the outer world, until one was devised by a Company whose faith was never broken and whose obligations were worth just one hundred cents to the dollar in any clime where they could be found. / The Valleys of the Adirondacks and Champlain, had for forty years been agitated with hopes and plans of dissenting factions unable to mature a railroad outlet towards the Hudson or the St. Lawrence. It was not until March 1872 that a new Company was organized by Thomas Dickson, George T. Olyphant, LeGrand B. Cannon, George H. Cramer, and I. V. Baker. Hon. Smith M. Weed, of Plattsburgh was foremost in the organization of the new Company. From the inception of the Company in 1872 until the completion of the New York & Canada Railway in November 1875, his cooperation and pluck were so heartily manifested that the inhabitants of the iron ore region on the western order of Lake Champlain hitherto walled in by the Adirondacks upon one side and the Green Mountains upon the other, look upon him and Thomas Dickson as their prime deliverers. Simultaneously with the election of Officers of the New York and Canada Railway Company, by which the latter region agreed to build the road and take a perpetual lease of it. It is now known as the Champlain Division of the Delaware and Hudson Canal Company's Railway. / This new Division chartered as the New York & Canada Railroad with a capital stock of \$3,000,000, aimed at two distinct purposes; First, to allow the Delaware and Hudson Canal Company to ship Lackawanna Coal from its mines to Montreal and intervening country over its own rail, at all seasons of the year; Second, to develop the grand iron ore interests of Clinton, Essex, and adjoining counties on the western border of the enchanting Champlain where capital

from New York City, from Scranton, Wilkes Barre and other places had already sought profitable investment in lands, forges, and furnaces of this ferruginous region." (*Hollister*, pp. 184-185)

D&H Coal by rail to Canada, November 1875:

"By the completion of this line, the Delaware and Hudson Canal Company obtains an advantage over all its coal mining rivals in being able to ship its anthracite to a foreign market without using water communication. The Lehigh Valley Railroad, which has its northern shipping Depot at Fair Haven on Lake Ontario, the Northern Central, which ships at Sodus Bay, the Delaware, Lackawanna, & Western, which ships at Oswego are all liable to have their lines of water traffic cut off in the winter. To a certain extent the Delaware and Hudson Canal Company will enjoy a winter monopoly. The consumption of fuel in Canada is on the increase—the last five years it having risen in the eastern townships alone from 1,000 to 10,000 tons per annum—while the city of Montreal last year consumed 160,000 from the Delaware & Hudson Canal Company." (*Hollister*, pp. 187-188)

On February 17, 1875, at the opening ceremonies in Montreal of the New York & Canada Railroad, Galusha A. Grow said the following (*Hollister*, pp. 190-193):

"The next day, at the grand reception given the New York and Canada Railway delegation at Montreal, the Mayor presiding Hon. Galusha A. Grow being called upon by Thomas Dickson to respond to the Toast offered by the Mayor "OUR GUESS AND THEIR NEIGHBORS" gave the following historical response:

"I represent here the great corporation which has extended its arms out from its mines in Pennsylvania as far as this Dominion of Canada. As a corporation, it is not as old as many of the gentleman whom I see before me. I see one gentleman before me who was present when the first shovelful of earth was thrown from the first excavation in the mines of the Delaware and Hudson Canal Company; (John B. Smith, Supt. Pennsylvania Coal Company). / And he to-day manages one of the great coal enterprises of Pennsylvania, which carries almost 1,500,000 tons of coal annually. I see others who were witnesses of the birth of this great enterprise, the Delaware & Hudson Canal Company, which to-day covers such a vast areas of country, bringing to the firesides of citizens warmth and comfort. In 1825, when it began operations, only 363 tons of coal were mined in a year; but to-day the production exceeds three millions of tons annually, spreading over the eastern portion of the States and ramifying its distribution all over the continent (hear, hear). At the former period, the population of the United States scarcely exceeded fifteen millions, while it now numbers forty millions, spanning the continent with the great Empires of the States. Then the colonists few in number, were hemmed in by the ocean in front and the wilderness and savages in rear; to-day this country is the home of the arts, sciences and civilization, in which is spoken the language of our mother tongue—the common language of the continent—the common language of the little Island, anchored in the midst of the ocean, which for centuries had shaped and moulded the destinies of the world (applause) / Canadians

and their fathers had clung to the old paternal mansion, which Americans left, but both were moving side by side, animated by the same spirit of progress, carrying on the same arts, and speaking the same language, possessing moreover the same great elements for carrying these people to higher and better destinies (applause) This corporation illustrates, perhaps better than any other institution on this broad continent, the development of the material resources of the country, and of all that adds to the comfort of the people. Begging [perhaps "beginning"] first with ox-teams—they hauled the coal from their mines to the canal, transporting it for sixteen miles over the mountains—thus transporting 7,000 tons of coal alone during the first year—and one of the most enthusiastic of its pioneers, who predicted that the time would come when the canal would carry 300,000 tons of coal to market in a year, was derided by his associates; but to-day it carried three million of tons (hear, hear) / While this enterprise from such a small beginning, had developed in to such mammoth proportions, the great material interests of the country had been developed, in connection with all branches of industry. While the mighty material development of the country had been thus accomplished, changes mightier still have been wrought in institutions and in the habits and thoughts of its people. Slavery, which from the first had permeated the atmosphere of society of more than one-half of the Republic, had been abolished, and amid the expiring flames of the Civil War, the martyred President has sealed with his blood the emancipation of the negro race. The land of Washington had ever been the home of the emigrant, and the asylum of the exile from every clime, and of all races of men (applause) They had the sympathy and cooperation of surrounding nations, and they awaited the new and brighter dawn of the day of better and nobler destinies. The Company assembled represented the great industrial interests of this county, they met to represent a new and higher and better spirit, and they came together to celebrate the union of Canada and the Republic commercially by another line of railway (applause) / In closing he said: Forty years ago a family of emigrants, who had bid farewell to home and kindred in the lowlands of Scotland, landed on the busy wharves of your city. The mother leads a barefoot boy along its streets, little dreaming of the destiny in store for him. / Blessings on thee, little man, / Bare foot boy with cheek of tan, / With thy turned up pantaloons, / And thy merry whistled tunes, / Outside sunshine, inside joy, / Blessings on thee bare foot boy. / The father is intent only on finding some place where he may earn his daily bread by his daily toil. After a fruitless search he passes out of the city and across the great Empire State, and makes his first home in the New World amid the hills of Northern Pennsylvania, and finds employment in the machine shops of the Delaware and Hudson Canal Company and the boy works in their mines. / To-day we bring back the barefoot boy, in the person of Thomas Dickson, and present him as one of the noblest specimens of a man, and as the best and most conclusive argument in behalf of the spirit and genius of the institutions of the Great Republic, under whose benign influences his history is but the record of so many others who, from penury and pinching want in childhood, have, unaided and alone, by their own inherent force of character, climbed the ladder that leans against the sky. But few, if any however, have achieved a success more creditable to the man than that of the Scotch boy, who to-day, with so much ability, administers the affairs of one of the oldest and most worthy enterprises in the development of American industries. If he is a benefactor who makes two spears of grass grow, where but one grew before, what shall be said of him, who, aided by large-minded capitalists, opens great arteries of trade, making the desert and waste places bloom and

blossom like the rose, linking together discordant and widely-separated peoples, and uniting in the bonds of interest and sympathy jarring nationalities? Despite rock and frost, this President and his Company have broken through the barrier of ice and snow that for almost half the year has heretofore separated us, and henceforth their locomotives will daily lay at your feet their treasures of black diamonds, gladdening the hearts and warming the firesides of y our people of every grade and condition."

Evan H. Williams was named an engineer by the D&H in February 1879:

About the man, we read the following in *Portrait and Biographical Record of Lackawanna County Pennsylvania*, p. 572: "Reared to manhood upon his father's farm, the subject of this sketch [Evan H. Williams] learned habits of industry under the training of his parents. His first work in the employ of the Delaware & Hudson Company was that of shoveling dirt on a section, and later he was employed at the roundhouse. Faithful in humble duties, he was promoted to be fireman on an engine, and remained in that capacity for six years and five months, in this way gaining a thorough knowledge of the locomotive in all its details. In February, 1879, he was made an engineer, and has since held that position. / . . . March 30, 1879, he was united in marriage with Miss Jennie Smith of Carbondale, and they are the parents of a daughter, Alice. . . Since 1871 Mr. Williams has resided in Carbondale and now owns and occupies No. 54 Terrace Street, where has a cozy home, tastily furnished and provided with all the comforts of life."

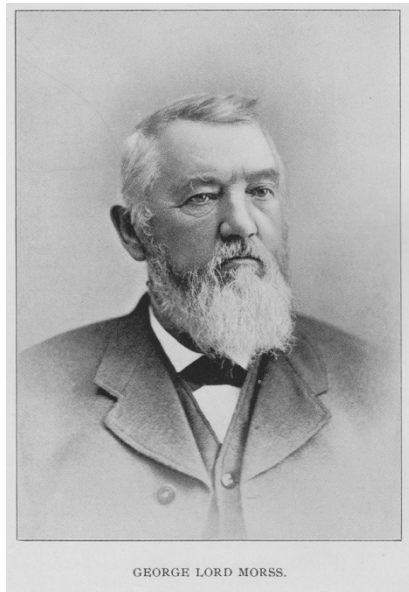
Milo Gardner was promoted to the position of engineer on the D&H Railroad in 1881:

He was born April 19, 1859 in Factoryville, PA, the son of Jeremiah and Matilda (Carpenter) Gardner, who died at the ages of thirty-three and thirty-six respectively, leaving three children, Milo, Nelson, and Waty. From age 12 to age 16, Milo Gardner was a pupil in the Soldiers' Orphans' School at Harford, PA. In the portrait of the man in *PABRLCP*, pp. 484-488, we read: "He then began [age 16] to work on the railroad, first shoveling dirt on a section, later working as brakeman at Mill Creek , and then coming to Carbondale, where he continued as brakeman. In 1881, he was promoted to the position of engineer, an advancement justly merited, for he has always been industrious, reliable and efficient, and is among the best engineers on the road. . . In 1883 he was united in marriage with Miss Harriet, daughter of H. B. Curtis, of Wayne County." They were the parents of three children: Ray, Burdette, and Edith. The Gardner family resided at 80 Cemetery Street, Carbondale.

July 31, 1882: death of George Lord Morss:

"George Lord Morss was born in Windham, Greene County, N. Y., May 26, 1816, a son of Foster Morss. He attended the common schools, also the Delhi and Kinderhook academies, after which he taught school for a number of terms. His first business interests were in partnership with his brothers, near Carbondale, in the tanning and lumber trade, but later he decided to sell out to them and go west. A preliminary trip for the purpose of looking up a location, however, led him to decide that no place offered better advantages than Lackawanna County, then a part of Luzerne. Accordingly he returned here and purchased the interests owned by his brothers. On a

slight eminence he erected, in 1853, a commodious residence, and here his remaining years were spent. A man of good judgment and executive ability, he gained prominent recognition, and his death, which occurred July 31, 1882, was counted a public loss. / The lady who for more than forty years was the faithful helpmate of Mr. Morss was in maidenhood Lois Austin Tuttle, a daughter of Gen. Jehiel Tuttle, who settled in Greene County, N. Y., during the pioneer days of its history. Mrs. Morss was born in Greene County, September 17, 1818, and died at the family residence in Carbondale October 9, 1896. The four children who blessed this union are named as follows: Merilla E., wife of L.W. Morss, of Scranton; Isabella, deceased, wife of J. Aitken; Amada L. and Lois R., who occupy the old homestead."



On the left, the likeness of George Lord Morss that is given facing page 499 in *Portrait and Biographical Record of Northeastern Pennsylvania*. On the right, the commodious residence that G. L. Morss had built on a slight eminence in Simpson in 1853. This painting, titled "Morss Mansion Simpson," by Marianne Stratford, is in the collection of Paul McMahon, Wilton Manor, FL. In 1996, a group called Fell Township Renaissance worked to save the Morss Mansion. The owners of the building, the Grattan Singer Hose Company voted not to allow that group to seek funding to improve the building, and the building was torn down.

1884: William J. McMullen is appointed train and roadmaster of the Gravity Railroad: Here is the likeness of William J. McMullen that is given on page 574 of *Portrait and Biographical Record of Lackawanna County, Pennsylvania*:



Here is the biographical portrait of William J. McMullen that is given in that same volume on pages 575-576:

"WILLIAM J. McMULLEN, the able train and roadmaster of the Gravity branch of the Delaware & Hudson Railroad at Carbondale, was born in Wayne County, Pa., March 12, 1844, and there his early life was spent, his education being obtained in the schools of the home neighborhood. At the age of seventeen he became connected with the Delaware & Hudson Railroad in the carpenter department and three years later was made foreman of a gang of carpenters. By gradual promotions he worked his way up to the position of general foreman, later was made track master, and after a time his employers testified their appreciation of the value of his services by promoting him to the position of master of transportation. Through this series of promotions he was enabled to grasp every detail of the work and thoroughly familiarize himself with the different departments. / In 1884, after a steady and faithful service of more than twenty years, Mr. McMullen was tendered the position of train and road master of the Gravity branch of the road, a very responsible office, but one which he is thoroughly qualified to fill. His long years of experience and adaptability in managing men make his services of the greatest value to the company. An indefatigable worker and enterprising man, he has not only guarded well the interests of the company, but he has done it in such a manner as not to lose the confidence of the people. On the contrary, he is popular with all classes of citizens. / In addition to his railroad duties, Mr. McMullen is superintendent of the Crystal Lake Water Company. Since 1870 he has made his home in Carbondale, where he is a member of the Episcopal Church and the blue lodge of Masons. During the Civil War he was determined to take a part in defense of his country and twice enlisted at the outbreak of the Rebellion, but the first time was rejected on account of his youth, and the second time at the request of his widowed mother. . . / December 6, 1868, Mr. McMullen married Miss Mary A. Thorp, daughter of a prominent farmer of Wayne County and a

lady of amiable disposition. In politics he is always solid for Republican principles and unwaveringly lends his influence and gives his suffrage to that party. His busy life, however, does not permit him to take an active part in public affairs, yet his influence as a man of business ability cannot but be felt among his fellow citizens."

Note: in February, 1900, William J. McMullen was killed in a railroad accident at Panther Bluff. For information about that accident, see the volume by the present author on the 1899 configuration of the Gravity Railroad.

T. Griffin Smith was freight agent for the D&H:

"T. GRIFFIN SMITH, freight agent for the D. and H. Canal Company, was born in Carbondale, in 1853, has been employed in the freight office since 1872, and has been agent since 1879." (1880, p. 452E)

More about T. Griffin Smith:

". . . In the schools of this city [Carbondale], T. Griffin Smith received the rudiments of his education, after which he was a student in the schools of Dumfries, Scotland, in company with John H. Orchard, who was his father's successor as master car builder of the Delaware & Hudson car shops. On his return from Scotland, he secured a position as clerk in the Delaware & Hudson freight office, and after four years, in 1877, he was made freight agent which position he has since held." *Portrait and Biographical Record of Lackawanna County Pennsylvania*, 1897, p. 176.

The long and distinguished career of Claude R. Smith with the D&H:

CLAUDE R. SMITH, ticket agent of the Delaware & Hudson Railroad at Carbondale, was born in Bannerville, PA., June 12, 1868. . . "His father . . . passed from earth in March 1876, when in the prime of manhood, and the orphan lad afterward made his home with his maternal grandfather, John Bilger, who was station agent for the Pennsylvania Railroad at Middleburg, Pa. Going in the office with him, he learned telegraphy and as he was an apt pupil he soon mastered the art. At the age of thirteen he was given charge of the telegraph office at Vail Station on the Pennsylvania Railroad. . . / In August, 1888, Mr. Smith made an application to the superintendent, Rollin Manville, for a position on the Delaware & Hudson Railroad, and the latter, becoming interested in the youth, told him he would give him a trial and sent him, as telegraph operator, to the little station of Mill Creek. So satisfactory was the result that the superintendent a few weeks later called him to Carbondale and made him ticket agent at the Union station. This position he has held since September 19, 1888. On the first of February, 1896, when the company occupied the new city station, he was put in charge of both stations, with his headquarters in the new depot. / A thorough and faithful business man, and well informed in every department of railroading, Mr. Smith has the confidence of his superiors and guards well their interests. His long experience makes his services especially valuable to the company, who appreciate his fidelity to them." (*Portrait and Biographical Record of Lackawanna County, Pennsylvania*, 1897, pp. 412-13)

D&H Gravity Railroad Passenger Time Table, Takes Effect, Monday, July 4, 1898 (superseding time table dated January 17, 1896):

DELAWARE AND HUDSON CANAL Co.,

GRAVITY RAILROAD.

PASSENGER TIME TABLE.

Takes Effect Monday, July 4, 1898.

{ SUPERBEDDING TIME TABLE }
 DATED JANUARY 17 1898.

EASTWARD.								WESTWARD.							
STATIONS.	81	83	85	87	89	91 *	93	STATIONS.	82	84	86	88	90	92 *	94
	A. M.	A. M.	A. M.	A. M.	P. M.	P. M.	P. M.		A. M.	A. M.	A. M.	P. M.	P. M.	P. M.	P. M.
WILKES-BARRE, LEAVE.	5 35	8 00	9 20	11 07	1 35	3 01	4 32	HONESDALE, LEAVE.	7 25	9 35	11 05	1 15	3 30		5 35
SCRANTON, LEAVE.	6 20	8 53	10 13	M. 12 00	2 20	3 52	5 25	PROMPTON,	7 41	9 51	11 21	1 31	3 46		5 51
Union Sta., CARBONDALE, LVE.	7 50	9 40	11 05	P. M. 1 25	3 09	4 32	6 08	NUMBER 16,	7 47	9 57	11 27	1 37	3 52		5 57
Main Street, CARBONDALE,	7 56	9 46	11 11	1 31	3 15	4 38	6 14	KEENS,	7 52	10 02	11 32	1 42	3 57		6 02
FARVIEW,	8 18	10 08	11 33	1 53	3 37	5 00	6 36	WAYMART,	8 04	10 14	11 44	1 54	4 09	5 14	6 15
WAYMART,	8 28	10 18	11 43	2 03	3 47	5 10	6 46	FARVIEW,	8 13	10 23	11 53	2 03	4 18	5 23	6 23
KEENS,	8 37	10 27	11 52	2 12	3 56		6 55	Lincoln Ave, CARBONDALE,	8 33	10 43	12 13	2 23	4 38	5 43	6 43
NUMBER 16,	8 40	10 30	11 55	2 15	3 59		6 58	Lookout, CARBONDALE,	8 46	10 56	12 26	2 36	4 51	5 56	6 56
PROMPTON,	8 46	10 36	12 01	2 21	4 05		7 04	City Station, CARBONDALE,	8 49	10 59	12 29	2 39	4 54	5 59	6 59
HONESDALE, ARRIVE	9 05	10 55	12 20	2 40	4 24		7 23	Union Sta., CARBONDALE, ARR.	8 50	11 00	12 30	2 40	4 55	6 00	7 00
								SCRANTON ARRIVE.	9 34	11 58	1 23	3 25	5 43	7 43	8 43
								WILKES-BARRE ARRIVE.	10 14	12 50	2 15	4 20	6 57	8 35	9 35
	A. M.	A. M.	P. M.	P. M.	P. M.	P. M.	P. M.		A. M.	P. M.	P. M.	P. M.	P. M.	P. M.	P. M.

s Indicates regular stop. f Stop on signal, or on notice to Conductor. All trains will run daily, except Sundays.

* Trains Nos. 91 and 92 will run between May 28 and October 15 only.

CONNECTIONS:—Trains 82, 84, 86, 88, 90 and 92, at Carbondale, with Trains for Scranton, Wilkes-Barre, New York, Philadelphia, &c., and Binghamton, Elmira, and the West.
 Trains 82, 90 and 92 at Carbondale with Erie R. R., for Susquehanna, &c.
 Trains 81, 83, 85, 87, 89, 91, and 93, at Carbondale, with Trains from Wilkes-Barre, Scranton, &c.
 Trains 83 and 93, at Carbondale, with Train from Susquehanna, &c.
 Train 88, at Carbondale, with Train for Oneonta, Albany, Saratoga, Boston, &c.
 Trains 91 and 93, at Carbondale, with Train from Saratoga, Albany, &c.
 Train 87, at Honesdale, with Erie Railway for Port Jervis, Middletown and New York
 Trains 86 and 90, at Honesdale, with Erie Railway from New York, &c.

H. G. YOUNG, Second Vice President,
Albany, N. Y.

C. R. MANVILLE, Superintendent,
Carbondale, Pa.

Observations:

--trains moving eastward (81, 83, 85, 87, 89, 91, 93) had odd numbers; those moving westward (82, 84, 86, 88, 90, 92, 94) had even numbers

--six trains both ways year round, with an extra train from Carbondale to Waymart and one from Waymart to Carbondale between May 28 and October 15; trains from Carbondale originate at Union Station (located on Dundaff Street, on the lot now occupied by the Bonacci office building); trains to Carbondale terminate at Union Station; all trains ran daily except Sundays

--four regular stops (Carbondale to Honesdale) and five regular stops (Honesdale to Carbondale); three "stops on signal, or on notice to Conductor" each way

--C. R. Manville was the Superintendent in Carbondale in July 1898; H. G. Young was Second Vice President in Albany, NY in July 1898

--Four Carbondale stations: Union Station (Dundaff Street), Main Street Station (behind Ben-Mar restaurant), City Station (behind Trinity Church), and Lincoln Avenue

On the back of the time table given above are the extracts, given below, from "Book of Rules for the Government of the Transportation Department of the Delaware and Hudson Co.'s Railroads." These rules are very interesting. Nowhere in any of the published materials on the D&H can one find more detailed data on the following topics: Signal Rules, Lamp Signals, Fixed Signals, Rules Governing the Use of Signals, Movement of Trains.

Extracts from Book of Rules for the Government of the Transportation Department of the Delaware and Hudson Canal Co.'s Railroads.

Rule 1. The head of each department must keep himself conversant with the rules, supply copies of them to his subordinates, see that they are understood, enforce obedience to them, and report to the proper officer all violations and the action taken thereon.

Rule 2. Every employe of this company whose duties are in any way prescribed by these rules, must always have a copy of them in his possession when on duty, and make himself perfectly familiar with every rule. He must render all the assistance in his power in carrying them out, and immediately report any infraction of them to the head of his department. Safety depends upon the strict observance of every rule.

Rule 6. Employes must wear the prescribed badges or uniforms while on duty.

Rule 7. No person in the employ of this Company, will be allowed to use intoxicating liquors as a beverage while on duty.

Rule 9. Employes will be expected and required to pay all honorable debts which they may contract while in the service of the Company.

Rule 10. No employe will be allowed to absent himself from duty, without permission from the person immediately over him.

Rule 16. A time table is the general law governing the arriving and leaving time of all regular trains at all stations. Time tables will be issued from time to time, as may be necessary. The time given for each train on such time tables, shall be known as the schedule of such train.

Rule 17. All trains are designated as regular or extra. Regular trains are those represented on the time table, and may consist of one or more sections. In case a regular train consists of more than one section, the first train will be known as the first section, and the following sections as second section, third section, etc. The second, third and fourth, etc., sections have the same general rights as the first section, but special order to one section will confer no rights upon the other sections, and unless they receive special orders, they must keep within the table rights of the schedule upon which they are running. All sections of a train, except the last, must display signals as provided in Rule 39. All trains not mentioned on schedule, will be known as extras. Extra trains will have no rights except such as are given them by special order from the Superintendent.

Rule 21. All extra trains are of inferior class to all regular trains of whatever class.

Rule 22. Each time table, at the moment it takes effect, supersedes the preceding time table, and all special instructions relating thereto; and trains shall be run as directed thereby, subject to the rules. All regular trains on the road running according to the preceding time table shall, unless otherwise directed, assume the times and rights of trains of corresponding numbers on the new time table.

Rule 25. On the time table the words "daily," "daily, except Sundays," etc., will be printed at the head in connection with each train, to indicate how it shall be run. The figures given at intermediate stations, shall not be taken as indicating that a train will stop, unless the rules require it. The following signs placed before the figures, indicate:

"s," regular stop.
"f," stop on signal, to receive or discharge passengers or freight.

SIGNAL RULES.

Rule 26. Employes whose duties may require them to give signals, must provide themselves with the proper appliances, and keep them in good order, and always ready for immediate use.

Rule 27. Flags of a proper color must be used by day, and lamps of a proper color by night, or whenever from fog, or other cause, the day signals cannot be clearly seen.

Rule 28. Red signifies danger, and is a signal to stop.

Rule 29. White signifies safety, and is a signal to go on.

Rule 30. Green signifies caution, and is a signal to go slowly. (Combined red and white flags will also indicate caution, and will be used by trackmen when repairing track.)

Rule 31. Green and white is a signal to be used to stop trains at flag stations for passengers or freight.

Rule 32. Blue is a signal to be used by car inspectors.

Rule 33. A red flag by day and a red lantern by night, or any signals violently given, are signals of danger, or perceiving which, the train must be brought to a full stop as soon as possible, and not proceed until it can be done with safety.

Rule 34. An explosive cap or torpedo placed on the top of the rail, is a signal to be used in addition to the regular signals. The explosion of one torpedo is a signal to stop immediately; the explosion of two torpedoes is a signal to reduce speed immediately, and look out for a danger signal.

Rule 35. Each passenger train, while running, must display two green flags by day and two green lights by night, one on each side of the rear of the train, as markers, to indicate the rear of the train.

Rule 36. Each passenger train running after sunset, or when obscured by fog or other cause, must display the head light in front, and two or more red lights in the rear.

Rule 39. Two green flags by day and two green lights by night, displayed in the places provided for that purpose on the front of a train, denote that the train is followed by another train running on the same schedule, and entitled to the same time-table rights as the train carrying the signals.

Rule 40. Two white flags by day and two white lights by night, displayed in the places provided for that purpose on the front of a train, denote that the train is an extra. These signals must be displayed by all extra passenger trains.

LAMP SIGNALS.

Rule 59. A lamp swung across the track, signifies stop.

Rule 60. A lamp raised up and down, signifies go ahead.

Rule 61. A lamp swung over the head, signifies back.

Rule 62. A lamp swung vertically in a circle, at arms length, at right angles with the track when the train is running, is the signal that the train has parted.

Rule 63. A flag or the hand, moved in any of the directions given above, will indicate the same signal as given by a lamp.

FIXED SIGNALS.

Rule 64. Fixed signals are placed at junctions, railroad crossings, stations and other points that require special protection. Special instructions will be issued, indicating their position and use.

RULES GOVERNING THE USE OF SIGNALS.

Rule 65. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown must be regarded as a danger signal, and the fact reported to the Superintendent.

Rule 70. The gong must be sounded for a quarter of a mile before reaching every road crossing at grade, and until it is passed.

Rule 72. One flag or light displayed as a classification signal will be regarded the same as if two were displayed; but conductors will be held responsible for the proper display of all signals.

Rule 74. White signals must be used by watchmen at public road and street crossings, to prevent persons and teams from crossing when trains are approaching. Danger signals must be used when necessary to stop trains.

Rule 75. Torpedoes must not be placed near stations or road crossings, where persons are liable to be injured by them.

Rule 76. All signals must be used strictly in accordance with the rules, and trainmen must keep a constant look out for signals.

MOVEMENT OF TRAINS.

Rule 78. No passenger train shall leave a station without a signal from its conductor.

Rule 80. A train of inferior class must in all cases, keep out of the way of a train of superior class.

Rule 84. A freight train must not leave a station to follow a passenger train, down grade, until five minutes after the departure of such passenger train.

Rule 85. Passenger trains running in the same direction must keep not less than five minutes apart.

Rule 91. All trains must approach the end of double track and junctions prepared to stop, and must not proceed until the switches or signals are seen to be right, or the track is plainly seen to be clear. All trains must approach all railroad crossings at grade under full control and prepared to stop before reaching them should the signals be against them, or the way not clear.

Rule 93. When a passenger train is detained at any of its usual stops an unusual length of time, the conductor must see that proper precautions are taken for the protection of his train.

Rule 94. When a freight or coal train stops at any usual stopping point, where the rear of the train can be plainly seen from a following train at a distance of at least one half mile, the flagman must go back with danger signals not less than 450 feet, and as much further as may be necessary to insure stopping the following train.

Rule 95. When it is necessary for the flagman to go back to protect the rear of his train, the next brakeman must immediately take the flagman's position on the train, and remain there until relieved by the flagman.

Rule 96. When a train is stopped by an accident or obstruction, the flagman must immediately go back with danger signals to stop any following trains.

Rule 99. Conductors must see that flagmen and brakemen perform their duties; and nothing in the rules giving specific or special instructions to flagmen or brakemen, shall be construed by conductors as in any way relieving them of responsibility in connection with the same.

Rule 100. The rear car of every passenger train must have a good brake, and a brakeman must always be stationed on that car when the train is in motion.

Rule 101. If a train should part while in motion, the trainmen must use great care to prevent the detached parts from coming into collision.

Rule 113 on the question of the proper adjustment of switches is very interesting. "... Whoever opens a switch must remain at it until it is closed, unless relieved by some other competent employee. . ."

Rule 113. Conductors will be held responsible for the proper adjustment of the switches used by them and their trainmen, except where switch tenders are stationed. Whoever opens a switch must remain at it until it is closed, unless relieved by some other competent employee. Whenever there is more than one train to use a switch, it must not be left open, unless one of the trainmen of the following train is at the switch and takes charge of it.

Rule 115. Conductors will be held responsible for the violation of any of the rules governing the safety of their trains, and they must take every precaution for the protection of their trains, even if not provided for by the rules. Trains are to run under the direction of the conductors, except when their directions conflict with these rules, or involve risk or hazard.

Rule 117. Flagmen, when left to protect the rear end of their train, have the right to ride free on such subsequent trains as may pick them up, until they overtake their own train.

Rule 118. Passenger conductors, and their brakemen must be on hand half an hour before the time of starting their train from any terminal station; and they must see that their cars are clean and in good and safe order.

Rule 119. Conductors must see that they have upon their trains, signal flags, red lanterns, a sufficient number of ordinary lanterns; etc.

Rule 120. Brakeman of freight trains must always ride outside of the cars, and must be at their posts, ready to apply their brakes at all times when the train is in motion, and they must not slide the wheels under any circumstances, and it is the duty of the conductor to see to this matter.

Rule 122. All trainmen are required to notice any defects in cars they are using, and report the same to the nearest inspector.

Rule 138. If any employee is in doubt as to the meaning of any rule or special instructions, application must be made at once to the proper authority for an explanation. Ignorance cannot be accepted as an excuse for neglect of duty.

Rule 139. Freight conductors will sign all waybills for the cars they handle. Agents and Yardmasters will notify the Superintendent of every instance where conductors leave bills unsigned, or with the number of car changed from original billing.

Rule 147. Conductors and baggagemen must see that all letters, way-bills, etc., consigned to their care, are promptly delivered.

Rule 148. Conductors must never allow road crossings to be obstructed.

Rule 149. Killing cattle will be regarded as evidence of negligence, requiring, in all cases, a satisfactory explanation from the conductor in person, or by writing to the Superintendent.

Rule 153. In all cases of accident, conductors must report same on blank form 16, being careful to see that reports are made in strict conformity to instructions governing same, as given on back of such blank form. These blanks will be kept at Carbondale, Waymart and Honesdale.

Throughout the nineteenth century, cows on the tracks of the Gravity Railroad were a problem, and many accidents involving cattle are reported in these volumes. The cows, it seems (Rule 149, above) were never regarded by the D&H as being at fault.

Honesdale and the D&H in General at the time of the 1868 Configuration

General report on D&H operations in Honesdale:

1863: "The Canal was closed by ice during the cold snap of last week. The coal brought from the mines is now being dumped on the deposit ground and in the 'pockets.' The past season has been a remarkably favorable one for the D. & H. Canal Company. Up to the second instant they had carried to tide water, 787,305.15 tons of coal. Up to the same time last year the amount was 581,963.19 tons—excess this year over last, 205,341.96 tons. The Company intend to do a large business next year. They have contracted for the building of one hundred boats during the coming winter, about one fourth of which number will be built at this end of the canal. The new boats are known as the 'Turner Log Bilge Boats,' some peculiarities of their construction have originated in the yard of Mr. Turner of this place. We understand that the new boats will carry more, and are built at less expense than those of any former model.—*Wayne County Herald*." (*Carbondale Advance*, December 19, 1863, p. 2)

D and H coal by Erie Railroad out of Honesdale 1868:

"DELAWARE & HUDSON RAILROAD AND CANAL COMPANY.--Since Friday last no coal has been shipped by the Delaware and Hudson Company, on account of the premature closing of the canal. The lower end of the canal is still open. Tomorrow they expect to resume shipping again by rail, and on the 20th of December next they expect to be ready to ship by the Erie Railway, by which time the chutes at Honesdale will be finished." (*Carbondale Advance*, Saturday, December 12, 1868, p. 2).

Jefferson Railroad from Hawley to Honesdale now operational:

"RAILROAD EXTENSION.—The extension of the Jefferson Railroad [from Hawley to Honesdale] is a fixed fact. The first train 45 cars, containing 12 tons each, left Honesdale yesterday. This improvement will be of immense value to the Del. & Hud. Canal Company, enabling them to compete with their great rivals in the shipment of coal during the winter months, from which, they have been heretofore debarred. The coal pockets are not all in, as yet, nor the tracks all laid, but a few days will remedy this. It was just three months, lacking one day, from the time the first ground was broken until cars passed over a well made road.—*Honesdale Citizen*." (*Carbondale Advance*, January 23, 1869, p. 3)

Nearly a half million tons awaiting shipment at Honesdale:

"The D. & H. C. Co. has nearly half a million tons of coal piled at Honesdale, which will be greatly increased by the time navigation opens." (*Carbondale Leader*, March 22, 1873, p. 3)

Edward Baird took care of the torches that illuminated the yard and storage piles at Honesdale:

In the biographical portrait of Edward F. Baird (*Delaware and Hudson Railroad Bulletin*, August 1, 1935, pp. 115-16, 125), we read: "In 1880, at the age of 15, Mr. Baird was given a job as switchman on the Gravity at \$.40 a day, by Foreman John Ball. It was his duty to switch the coal

cars coming from Carbondale onto the docks where they were emptied into canal boats. At the end of the boating season the coal was stored in huge piles at Honesdale in anticipation of the following year's requirements. By the next spring as much as 500,000 tons of coal would be heaped in each of several piles at the waterfront. / Through the winter months Mr. Baird had two duties: he ran errands for officials and took care of the torches used for illuminating the yard and storage piles when the men worked after dark. Frequently the entire force was kept busy until 11 P.M. dispensing the coal brought over the Gravity during the day. The torches used were ball-shaped, with three wicks projecting from the top."

More Accidents at the Coal Pockets in 1885:

"Joseph Lutz, a Del. & Hud. employe, was seriously injured on Saturday while at work at the pockets in Honesdale. He was employed at one of the slides shoveling coal, when in some manner he fell into one of the chutes, and was carried down and jammed into the outlet, being completely covered with coal. Two loaded cars were about to be dumped upon him, when fortunately his whereabouts were discovered, and he was extricated, unconscious, from his perilous position." (*Carbondale Advance*, February 21, 1885, p. 3)

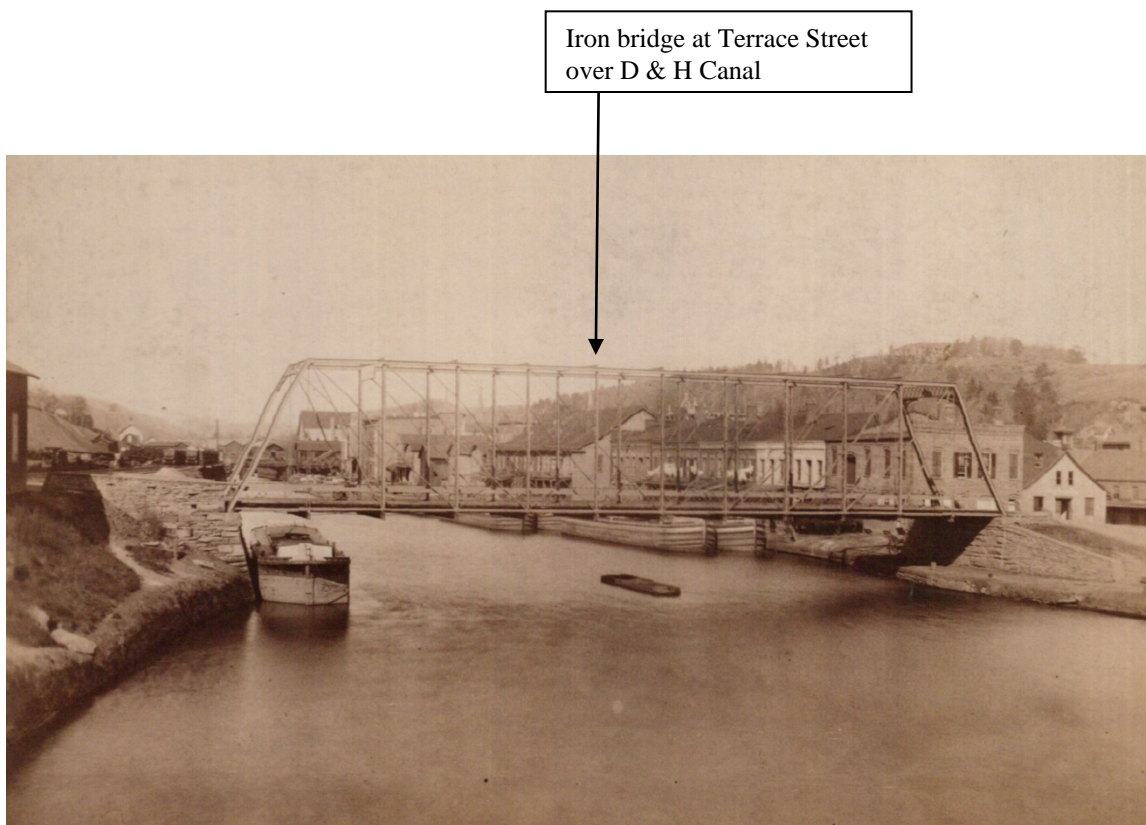
1885: One dead, two injured, at Honesdale Coal Pockets:

"The Honesdale *Citizen* of Thursday says: / A little before eight o'clock last Saturday morning, an accident happened at the Del. & Hud coal pockets, which resulted in the death of one man, and slight injuries to two others. The coal pile above the shutes is about fifteen feet in height, from the floor, and the top is frozen to the depth of five or six feet. As the coal is run from the lower part of the pile into the shutes, the frozen portions are loosened with picks. On the occasion referred to, John Tierney was at work on the surface of the pile, loosening the frozen coal. Suddenly it gave way under his feet, and he fell with it. Before he could escape a large mass of the frozen coal fell on him. He was extricated as soon as possible, but life was found to be extinct—his neck and both arms being broken. He lived on Russell's Hill, on the west side of the borough. He was about forty-five years old, and leaves a wife and five children, the youngest six years old, the next fourteen, and the others grown up. Peter Berline, living on Shanty Hill, and Wm. Vauman, living on Ladywood Lane, who were working farther up the shute, were caught at the same fall of frozen coal. Berline was buried up to his neck, and one ankle was severely sprained, while Vauman escaped with slight bruises. The place where Tierney was working was considered perfectly safe, but the quantity of frozen coal suddenly dislodged was larger than ever before known, and the accident was one that could not have been guarded against under the circumstances." (*Carbondale Advance*, March 21, 1885, p. 3)

Seven Bridges of Honesdale

1. "Iron Bridge over D. & H. Canal Basin"

This is the Terrace Street Bridge. This is No. 978 ("Iron Bridge over D. & H. Canal Basin) from "Views along the Honesdale Branch of the New York, Lake Erie & Western Railroad, Photographed and Published by L. Hensel, Port Jervis, N.Y." This is a copy print of this Hensel photograph is in the collection of the Wayne County Historical Society.



This bridge, in perfect condition, was still standing into the 21st century. It is no longer standing. In its place is a miserable little pedestrian bridge.

Here is another view of the iron bridge over the D&H Canal at Terrace Street. This photograph is in the archives of the Pike County Historical Society at Milford, PA.



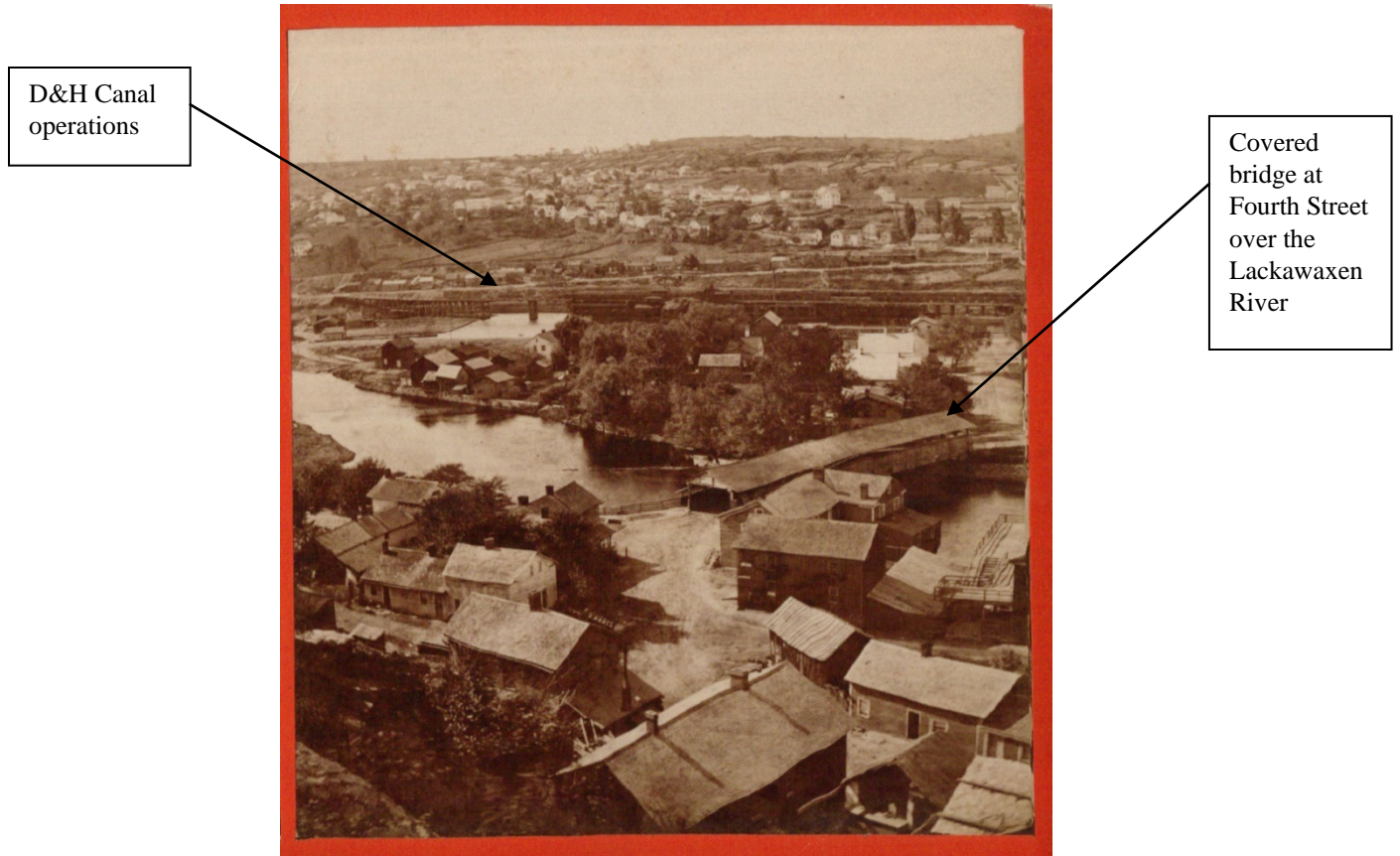
Here is a line drawing of the D&H Canal basin in Honesdale. Present-day Main Street is on the other side of the buildings seen on the left in this photograph. The iron bridge over the D&H Canal basin, the Terrace Street Bridge, is seen in the center background. This is a photograph, taken by the author on October 23, 2013, of the original line drawing by Manville B. Wakefield at the D&H Canal Historical Society and Museum in High Falls, NY.



2. The Fourth Street Bridge

“Covered Bridge and Shanty Hill, from Lower Ledge” This is No. 903 from “Stereoscopic Views of Honesdale, Pa., Photographed and Published by L. Hensel, Port Jervis, N. Y.”

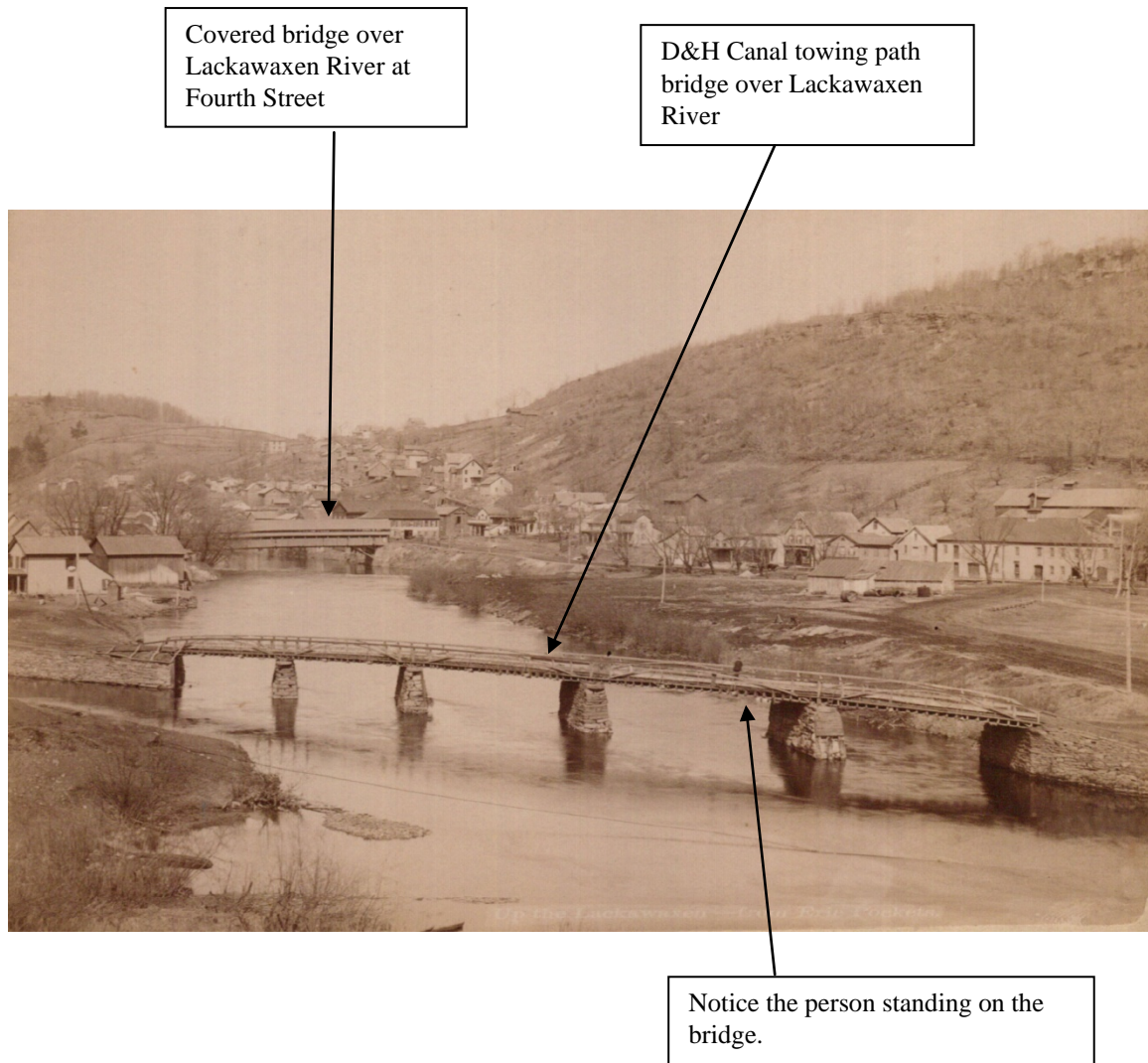
Present-day Route 6 passes over the Fourth Street bridge in downtown Honesdale.



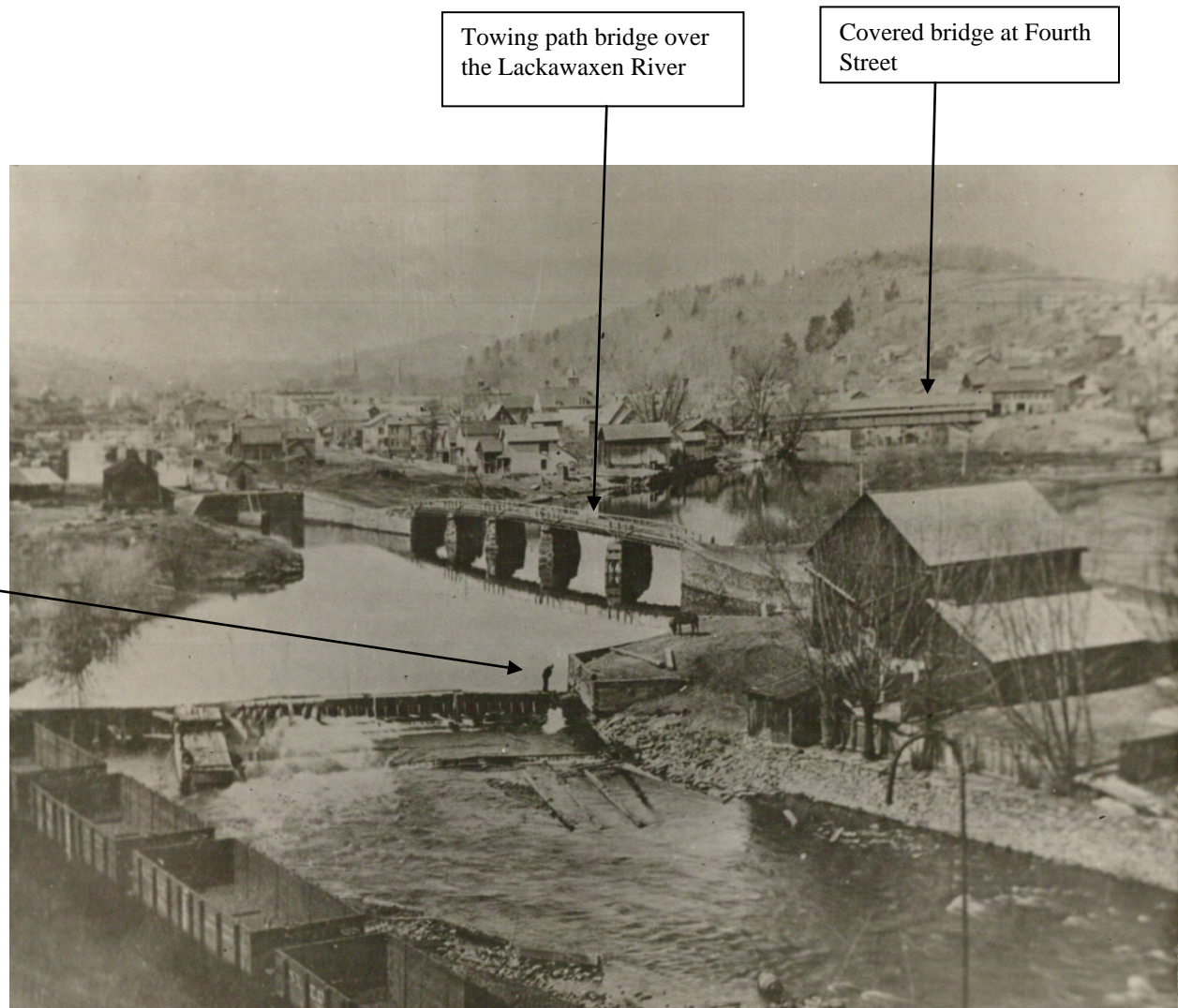
Covered 4th Street Bridge: built in 1847 by Charles Jamison. Originally made of white pine, a single span nearly 200 feet long. Later, a stone pier had to be placed under the center of the bridge; later the bridge was strengthened with iron rods. On May 27, 1866, at about 5 P.M. a cyclone lifted the bridge, turned it upside down, and dropped it into the river. Thomas Brown of Honesdale was awarded the contract, \$6,600, for a new bridge, which was opened early in November 1866. In 1867 the bridge was covered. It was in use until the early 1900s.

3. D&H Canal towing path bridge

The towing path bridge, with a pedestrian on it, is in the foreground; the covered bridge at Fourth Street can be seen in the rear, left, of the photo



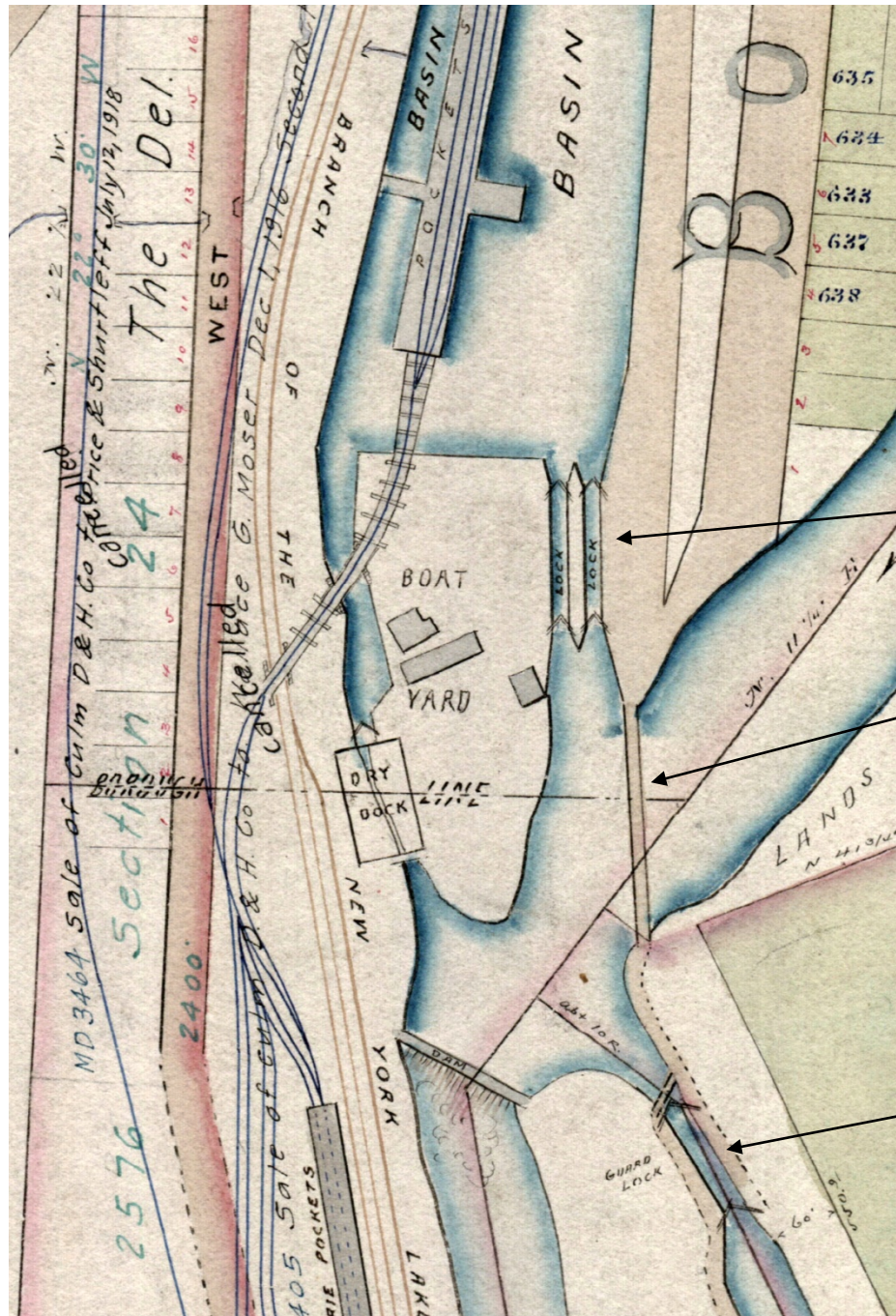
Another view of the towing path bridge. This one from the archives of the Pike County Historical Society, Milford, wherein this photo is titled: "Looking North from [the] Erie Coal Pockets." Note that the covered bridge at Fourth Street, over the Lackawaxen River, is also visible in this view.



The Towing Path Bridge on the 1895 Gravity Railroad map

The first locks out of Honesdale, on the lower basin, were double locks (the only set on the entire system), numbered 37 and 38, where the loaded and empty boats moved together on the canal.

These two locks are shown to the right of the words “BOAT YARD” on the map given below. Just below those two locks and to the right is the towing path bridge (bisected by the Borough Line on the map) over the Lackawaxen River; the towing path continues down to the Guard Lock and then along the Canal itself.



The double locks: Locks No. 37 and 38

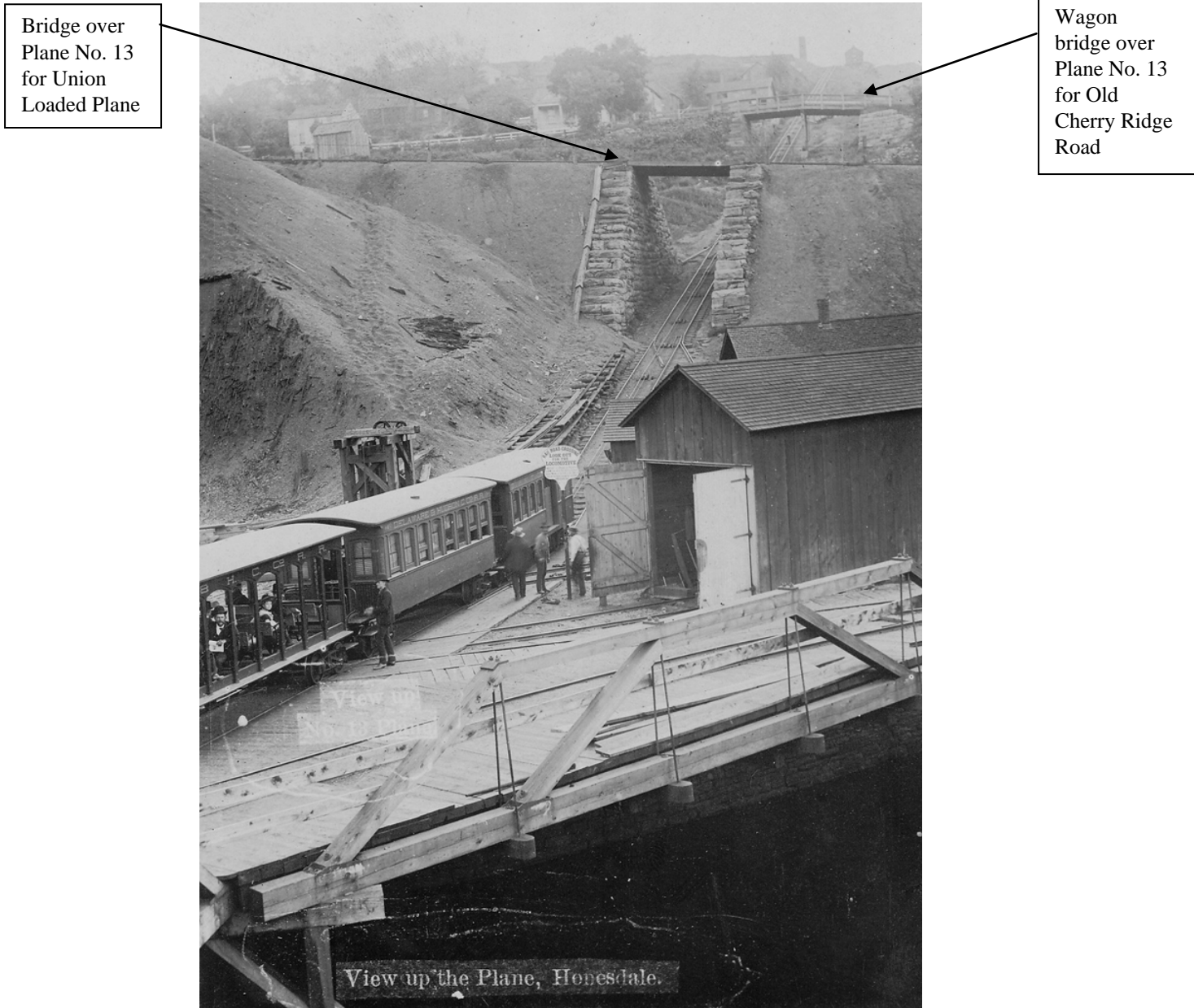
Towing path bridge over the Lackawaxen River

Guard lock at the entrance to the canal

4. Bridge over Plane No. 13 for Union Loaded Plane

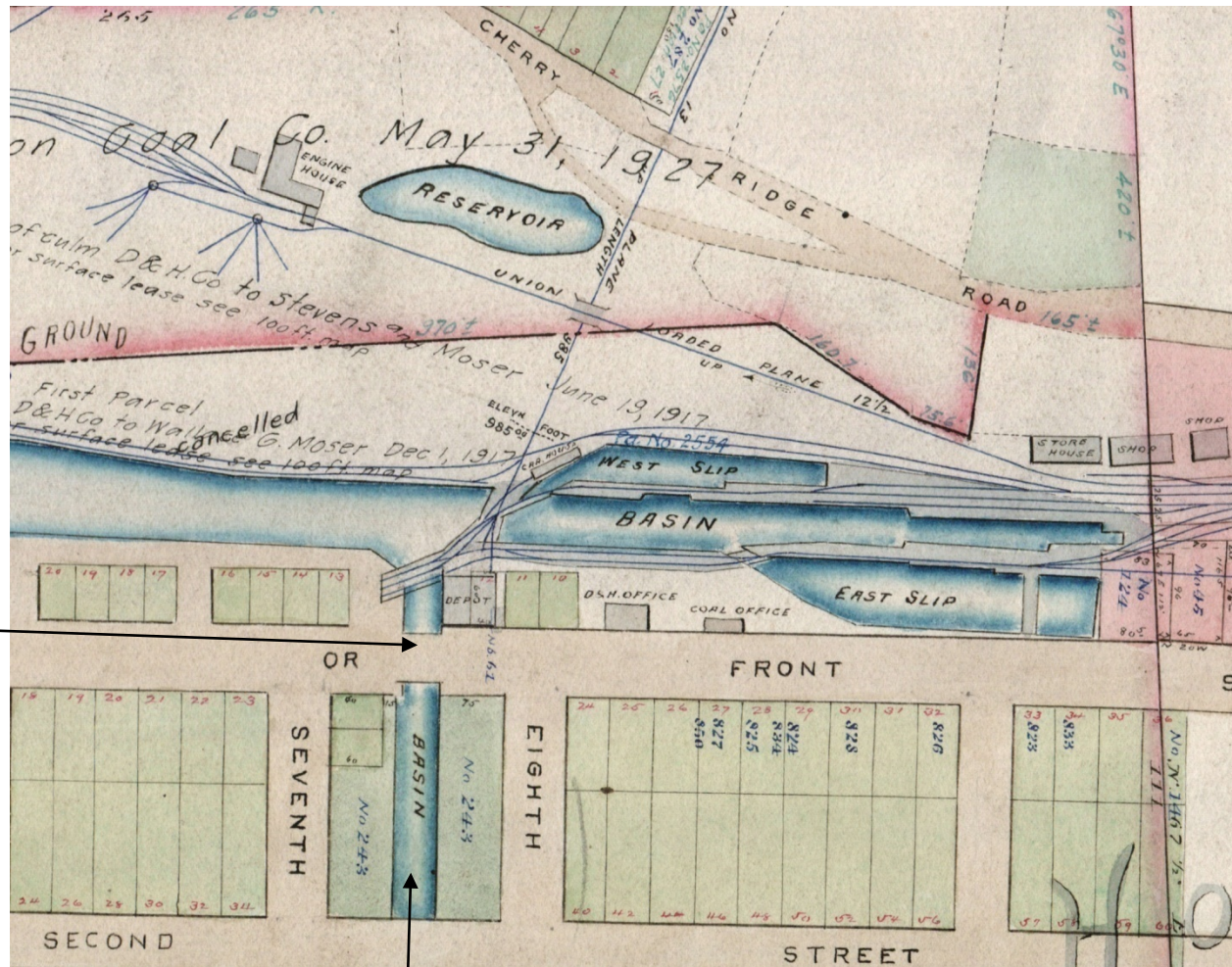
5. Bridge over Plane No. 13 for Old Cherry Ridge Road

"View Up the Plane, Honesdale from Orig. Photo Souvenir of Del. & Hud. Gravity Road. Published by L. Hensel, Hawley, PA." The first bridge under which D&H Plane No. 13 travels is the Union Loaded Plane (up which cars were pulled from right to left, where the engine house (not seen in this photo) was located); the second bridge is the Old Cherry Ridge Road bridge over the plane). The Union "light" plane, which was powered by an engine at the head of the D&H's Plane 13 went from the head of Plane 13 down across the hill to the East to the Erie Pockets.



6. The Basin Bridge

The D&H Canal basin was extended under First or Front Street to the block between Seventh and Eighth Streets to provide Canal access for private commercial concerns.



Location of bridge over Main Street to Wilbur and Patmore Boat Basin

Wilbur and Patmore boat basin

In Leslie's *Canal Town*. . . , p. 164, we read the following about the bridge across the arm of the Canal that extended across Main Street between Seventh and Eighth Streets: "Honesdale's Main Street was provided with two new bridges in the 1870's. To enable traffic to cross the arm of the

canal which extended across Main Street about where the Honesdale Dime Bank now stands, a bridge usually referred to as 'the basin bridge' was needed. . . / When the basin bridge had to be replaced in 1871, what was called a 'tubular arch bridge' made by E. King & Co. of Cleveland, Ohio, was put up. This iron bridge can be seen in many photographs (Plate IV) and was fifty-four feet long, had two roadways, each twelve feet wide, and two sidewalks, six feet each. The total price was \$1,836."

Here is a photograph of that bridge, which separated the Honesdale Basin and what was called the Wilbur and Patmore Basin:



D and H buys freight line of Young as well as his lots contiguous to the lateral basin:

"We find the following item in the *Honesdale Democrat* of this week: / The Delaware and Hudson Canal Company have bought Mr. Young's freight line, and will hereafter run it on their own account. They have also bought his lots of land contiguous to the lateral basin in this borough." (*Carbondale Advance*, January 23, 1864, p. 2)

7. The Iron Bridge over the Lackawaxen River at Park and Main Streets:

The second iron bridge to be installed in Honesdale in the 1870s was the one across the Lackawaxen at Park and Main Streets. This bridge, which remained in service until 1902 when it was destroyed by an ice jam, was also made by E. King Company of Cleveland. The November 19, 1874 issue of the *Honesdale Citizen* contains the following description of the bridge: "The length of the structure is 76 feet, and it is supported by three arches. There are two 14 foot roadways, and two 7 foot side walks. The flooring is comprised of three-inch oak plank. The walks are protected by an iron railing surmounted by sharp spear heads, rendering it impossible for loafers and blackguards to sit upon them with any great degree of comfort and making it a perfectly safe place for ladies to pass without fear of insult."

Pennsylvania Coal Company's Railroad (aka "Pennsylvania Gravity Railroad)

- On April 16, 1838, the Pennsylvania State Legislature granted and approved the charter of the Pennsylvania Coal Company.
- Port Griffith on the Susquehanna River to Hawley. Hawley is 329 feet above Port Griffith, and Port Griffith is 561.3 feet above sea level. Port Griffith lies on the North Branch Canal and the Susquehanna River.
- James Archbald, chief engineer, with the assistance of Gideon Frothingham and James Seymour, laid out the general route of the PCC Railroad. "Frothingham worked the eastern or canal end of the route [from east of the tunnel to the canal basin at Hawley], and Seymour began the line of planes necessary to reach the top of the Moosic Mountains. John Stephens and Philander Silsbee assisted Seymour in locating the area for the loaded track. . . E. W. Weston, a civil engineer, located the loaded track from Middle Creek to Hawley with the assistance of Justice Alfred Hand who at that time was a 'rodman.' / At a later date W. R. Maffett was added to the engineering staff when it was decided to extend the gravity road into Wyoming Valley. Maffett relocated the line of ascending planes from Pittston to the Moosic Mountains and he had working with him C. I. A. Chapman whose immediate supervisor was Jacob Allsbaugh while he was on Number 5 Plane." (*"The Gravity" History of The Pennsylvania Coal Company Railroad 1850-1885* by Mary Theresa "T. C." Connolly, 1972, pp.9-10) Construction of the PCC's Gravity Railroad was begun in November, 1847; road became operational in June 1850

- Work on the Pennsylvania Coal Company's railroad began on March 28, 1848; Superintendents: William R Maffett (1847-1850), John B. Smith (1850-1895)

Loaded Track

There were **12 ascending planes with levels on the loaded track**. The 12 loaded planes were 4.37 miles long, the 12 loaded levels were 42.35 miles long, the complete loaded track was, therefore, 46.72 miles long. All of the motive power on the loaded track was furnished by stationary steam engines. On some planes the engine was at the foot of the plane; on others, it was at the head of the plane.

The 12 planes and length in feet:

1 (Port Griffith), 1162; 2 (Pittston), 1901; 3 Avoca, then called Pleasant Valley), 1954; 4 (Moosic, near Rocky Glen), 2218; 5 (South Scranton), 2270; 6 (Dunmore; "Bunker Hill"—this was a transfer point for crews from loaded to light track), 1901; 7 (Dunmore, on "Sport Hill; this plane had a curve to the left in it), 1901; 8 (Dunmore), 1901; 9 (Dunmore), 1901; 10 (Dunmore), 1901; 11 (Dunmore and Jefferson Township, 2112, there was a curve to the right in 'Old No. 11'); 12, 1954

The highest point on the loaded track was at the top of Plane No. 11, which was 1,400 feet above Port Griffith.

The 12 levels and length in feet:

1, 10,666; 2, 15,152; 3, 8,818; 4, 15,206; 5, 15,152; 6, 5,702; 7, 475; 8, 264; 9, 1,214; 10, 4,541; 11 (passed through a tunnel 755 feet long, the only one in the system; because of the tunnel it was not necessary to build another plane to get over the top of the mountain), 75,554 feet or 14.3 miles, the longest of the levels on the loaded track; 12 (Hawley), 71,966

Light Track

There were **10 ascending planes with levels on the light track**. The 10 light planes were 3.36 miles long, the 10 light levels were 43.56 miles long, the complete light track, therefore, was 46.92 miles long. The first three planes coming west from Hawley (Nos. 13-14-15) were originally powered by water wheels, with water from Middle Creek. Later, all the planes on the light track were operated by stationary steam engines. On some planes the engine was at the foot of the plane; on others, it was at the head of the plane.

The 10 planes and length in feet:

13 (Hawley), 1162; 14, 1637; 15, 1690; 16, 1901; 17, 1901; 18, 1464; 19 (Lake Ariel), 1531; 20 (near Saco), 1848; 21 (Wimmers. At the top of the plane near Wimmers, was the highest point on the light track. From there the cars rolled downward for 20.7 miles to Avoca and Plane No. 22), 1901; 22 (Avoca), 2,693

The 10 levels and length in feet:

13, 6,454; 14, 15,946; 15, 11,563; 16, 10,972; 17, 4,282; 18, 10,930; 19, 22,493; 20, 10,349; 21, 109,402 feet or 20.72 miles, the longest of the levels on the light track; 22, 25,397. The grade on these levels: James Archbald determined that a descent of 47 feet per mile was necessary for empty cars.

The two longest levels on the Pennsylvania Coal Company's railroad from Port Griffith to Hawley were Level No. 11 on the loaded track, which was 14.3 miles long, and Level No. 21 on the light track, which was 20.72 miles long.

Remarkably, the complete loaded track (all planes and levels) and the complete light track (all planes and levels) were very close to being the same length: the loaded track was 46.72 miles long, and the light track was 46.92 miles long. In the entire Pennsylvania Coal Company Gravity Railroad (loaded and light tracks) system there were 93.64 miles of track.

- Planes 13, 14, 15, were originally powered by water wheels, with water power supplied by Middle Creek. Middle Creek was also used as a source of power in the PCC shops (foundry, machine shop, hoisting, screening) at Hawley. Sal Mecca (06-18-2013) says that at one time there was a water wheel at Plane No. 6 in Dunmore. Sal Mecca: "These were 110 horsepower wheels [breast wheels, 30 feet in diameter and 20 feet wide]. The stationary steam engines were 50 horsepower."
- Sal Mecca, 11-08-2009: "There may have been a water wheel at Plane No. 1 initially, since the foot of the plane was on the river." Sal supports this hypothesis by pointing out that no head house is shown on the map in the map volume of the railroad in the collection of the Dunmore Historical Society. Sal also believes that all of the engine houses both on the light and loaded track were at the foot of the plane where, originally, there were water wheels, later to be replaced by stationary steam engines that burned wood.
- Strap rails from 1850 to 1869, when conversion to T-rail was begun (completed in 1875). T-rail on the loaded track was 40 pounds to the yard; on the light, 25 pounds to the yard.
- Plane No. 6 was the only double-tracked plane on the PCC Gravity Railroad.
- On May 10, 1850, the first coal was shipped to Hawley from Dunmore; on Saturday, June 8, 1850, the first coal was shipped from Pittston to Hawley.
- PCC coal cars: 10 ½ feet long, 3 ½ feet wide, carried from 3 ½ to 5 tons of coal. When the road opened in 1850, they had 900 3-ton coal cars; in 1885, when it closed, they had 3,600 5-ton coal cars. The empty cars weighted 2 1/2 tons.
- Some cars had brakes (a series of levers containing ratchets on the outside of the cars; brakes could be forced by standing on the levers); on some cars, sprags were used (the sprag was jammed between the wheel and the frame of the truck)
- "Passenger service existed only between Scranton and Hawley, with passengers boarding and descending at a point near present day Nay Aug Park, then known as *The Latches*". Sal Mecca, 11-08-2009

- Over a period of about a dozen years (1850-1863), the PCC paid the D&H for the shipment of its (PCC) coal through the D&H Canal from Hawley to the Hudson River. In both 1855 and 1856, the PCC sent about a half million tons through the D&H Canal. In 1856, court battles over tolls began between the D&H and the PCC. (The D&H increased toll charges following the 1847 enlargement of the Canal.) After a 17-year fight, the D&H "won" a judgment of \$350,000 (less than one quarter of the amount the D&H felt it was owed by the PCC). In his unpublished 1880 manuscript, Hollister says (p. 170): "A decision was rendered in February last in the suit against the Pennsylvania Coal Company for additional tolls, by which five cents per ton was awarded to us [the D&H] for every ton transported on our Canal by that Company since the 28th of July, 1853. The amount to which we are entitled under the decision, for the back tolls with interest, is about \$350,000. The decision will, however, probably be appealed from, and it may be some years before a final termination of the suit shall be reached. / The final decision was adverse to the Delaware & Hudson Canal Company." In 1863, the Erie was extended from Lackawaxen to Hawley, which meant that the PCC no longer had any need to send its coal to market via the D&H Canal.
- In 1863, when the Erie was extended from Lackawaxen to Hawley, year-round shipments of PCC coal were possible (The first coal train was run over the line on December 14, 1863.) From 1863 on, PCC coal was no longer shipped through the D&H Canal. In 1867, the Erie took over the section of the Jefferson Railroad from Hawley to Honesdale (The Jefferson Railroad was chartered by the Pennsylvania legislature in 1851.) and built the line, which opened on July 13, 1868.
- There was a weigh lock* and collector's office about ¼ mile east of the Hawley boat basin. The PCC boats were weighed there so that the D&H could accurately determine what tolls should be charged to the PCC for the shipment of coal through the canal. Weighing procedure: loaded boat floated into the weighlock and the water was then drained out so that the boat would rest on a grid/cradle which, by means of overhead linkage, was connected to the balances within the building. After the boat was weighed, the captain thereof was then given a clearance ticket.

*When a boat was not going to take its cargo all the way to tidewater, the load was weighed at Hawley. Otherwise the boat went down the Canal and the weight of its cargo was determined at Eddyville.
- There were towpath change bridges on both sides of the Hawley boat basin. A good illustration of such a bridge is given in *E. D. LeRoy* on page 69.

Some newspaper notices about the Pennsylvania Coal Company Railroad:

Pennsylvania Coal Company Gravity railroad nearly completed:

"The Pennsylvania Railroad is nearly completed. Operations will be commenced in a few weeks we understand on the whole route from Hawley to Pittston" (*The Lackawanna Citizen, and Carbondale Democrat*, May 10, 1850, p. 2)

There will be coal pockets at Hawley like those at Honesdale:

"The Pennsylvania Coal Co. are building 'Pockets' at Hawley, similar to those of the Del. & Hud. Canal Co. at this place. One of the workmen fell from the building on Monday, and received injuries which caused his death in a short time. –*Honesdale Dem.*" (*Carbondale Advance*, November 7, 1863, p. 2)

Gideon Frothingham was the brother-in-law of James Archbald:

"Death of Gideon Frothingham. / Hon. Gideon Frothingham, for many years one of our prominent citizens, and at one time Mayor of our city, died at his residence in Scranton on Monday morning of this week, aged 76 years. Deceased became a resident of our town about thirty years since, soon after his brother-in-law, James Archbald, now also deceased, assumed control of the operations of the Del. & Hud. C. Co. here. Previous to this he had been an engineer upon the State works in the State of New York, a member of its Legislature, and of the convention to amend its constitution. He practiced many years as Engineer here, and had to a great extent the charge of laying out the town lots. After assisting in the location and construction of the railroad of the Pennsylvania Coal Company, enjoying a competence of means, he retired from active business, and about 1860 removed to Scranton, where Mr. Archbald had previously located. He was a man of extensive acquirements and information, and of great originality and independence of character. His mind was active, and upon all subjects he scorned second-hand opinions. Having formed his own from the best sources within his reach, he cared very little whether they were like or unlike those cherished and adopted by others. Hence he was considered eccentric, but his intelligence and integrity secured him universal respect. / Thus one more of our landmarks, one more of those that gave to our town its early high character, has passed away. But few are left, and of these few, some are not now resident here." (*Carbondale Advance*, February 4, 1871, p. 3)

Sylvanus Shaffer killed near Plane No. 7:

"Sylvanus Shaffer, of South Canaan, was instantly killed near No. 7 Plane, on the Penn'a Coal Co's Railroad on Saturday afternoon. He was returning from Scranton with a crate of peaches, when, by some means unknown, he was thrown from the cars, and striking upon his head, died instantly, it is supposed from his neck being broken. He was about 48 years old. –*Honesdale Citizen.*" (*Carbondale Advance*, July 18, 1875, p. 3)

Operations on Pennsylvania Gravity will be suspended temporarily:

"A suspension of operations of the Pennsylvania Coal Co. will take place soon for the purpose of allowing the Company to put in new boilers and engines at Plane No. 4, and also to erect a new bridge at Hawley." (*Carbondale Advance*, February 26, 1876, p. 3)

Less coal mined in 1876 than in 1877 by Pennsylvania Coal Company:

"The Pennsylvania Coal Company has mined 222,267 tons of coal this year, which is a loss of 28,310 tons to the same date last year." (*Carbondale Leader*, April 8, 1876, p. 3)

Erie will haul Pennsylvania Coal Company coal from Hawley to Weehawken:

"The Pennsylvania Coal Company has a contract with the Erie Railway Company to transport

coal from Hawley to Weehawken. The contract is for 358 cars per day, or nearly 4,000 tons." (*Carbondale Leader*, September 9, 1876, p. 3)

Pennsylvania Coal Company sells 100,000 tons of coal at auction in New York:

"The Pennsylvania Coal Company sold 100,000 tons of coal at auction at New York on Wednesday last. The bidding was spirited and the prices realized were a few cents in advance of those received at the great sale of the combined companies a few weeks ago. On Wednesday of this week the D. L. & W. R. R. Co. will offer 100,000 tons at auction at the same place, and on Thursday the Delaware and Hudson Company will sell the same amount at auction." (*Carbondale Advance*, September 30, 1876, p.3)

Much praise for John B. Smith in the Scranton *Avalanche*:

"The Scranton *Avalanche* says: 'The Pennsylvania gravity railroad is called the best managed corporation in the United States. It pays its men good wages, and pays them promptly every month. Did all corporations look out as well for the welfare and comfort of their workmen, hard times and starvation would be unknown. The superintendent of the road, Mr. John B. Smith, of Dunmore, watches over his men with the solicitude of a father.' Our lively Scranton contemporary might have added with equal truthfulness that Mr. Smith has more brains and a larger heart than are possessed by a large majority of the todies and their superiors in office who work for another company not far from here. Mr. Smith has brought the stock of the Pennsylvania Coal Company up to a high value and keeps it there, while the stock of certain other companies managed without sufficient brains and heart, goes down in the market and stays there. The Pennsylvania Coal Company is always prosperous, which is owing to the careful and economical management of a noble and competent gentleman." (*Carbondale Leader*, November 25, 1876, p. 3)

Over two hundred thousand tons of Pennsylvania Coal Company coal sold in one day:

"On Tuesday the Pennsylvania Coal Company sold 225,000 tons of Pittston coal at auction in New York. The whole lot was disposed of in the space of half an hour. Prices as compared with the February sales show a falling off in all qualities of from ten to thirty cents per ton. The coal will be delivered during April and May. Steamer averaged \$2.65, grate averaged \$2.72, egg about the same, chestnut \$3.05, and stove about \$3.20." (*Carbondale Leader*, March 24, 1877, p. 3)

New passenger cars on Pennsylvania Gravity between Dunmore and Hawley:

"The new cars provided for passengers on the Pennsylvania railroad between Dunmore and Hawley, are elegantly fitted up, and will no doubt increase the travel on that delightful route. From year to year this line, like the Del. & Hud. gravity road between Carbondale and Honesdale, is coming into prominence, and the receipts from regular travel and excursions is largely on the increase." (*Carbondale Leader*, June 24, 1881, p.4)

See the following excellent article in the October 29, 1884 issue of *The New York Times*: "Extension of the Erie Road. How it will affect a wealthy coal corporation."

Erie and Wyoming Valley now in running order:

"DISPLACING A GRAVITY ROAD. / Wilkesbarre, Penn., Dec. 11.—The Erie and Wyoming Valley Railroad is now in complete running order and will afford great facilities for hauling coal of the Pennsylvania Coal Company. It is a locomotive road, taking the place of one of the two remaining important gravity railroads in the United States—that of the Pennsylvania Company, extending from the Lackawaxen-Hawley Line and the Delaware and Hudson Canal, at Hawley, over the mountain to the mines about Pittston, a distance of 47 miles. The gravity railroad has served to carry the heavy eastward shipments of the coal company to the Erie, but as it is of 4 feet 3 inches gauge a transfer was necessary at Hawley, while now the locomotives will take the coal trains directly from the mines about Pittston to Newburg or other market or shipping points. But the avoidance of the transfer is not the only advantage secured by the new road. Westward shipments of anthracite over the Erie are received by it at Carbondale, on the Jefferson branch, extending from the main line at Jefferson Junction nearly due south 34 miles, and over independent railroads 10 to 11 miles further. These shipments westward can be made most advantageously in box cars, which would otherwise go West empty. To get these cars to the mines it has been necessary to take them empty from New-York northwest to Jefferson Junction, 188 miles, and then south 40 miles or more, partly over the tracks of roads not interested in moving them promptly. By the new road 80 miles of hauling of empty cars will be saved." (*The New York Times*, December 12, 1884)

Dismantling the Pennsylvania Gravity now underway:

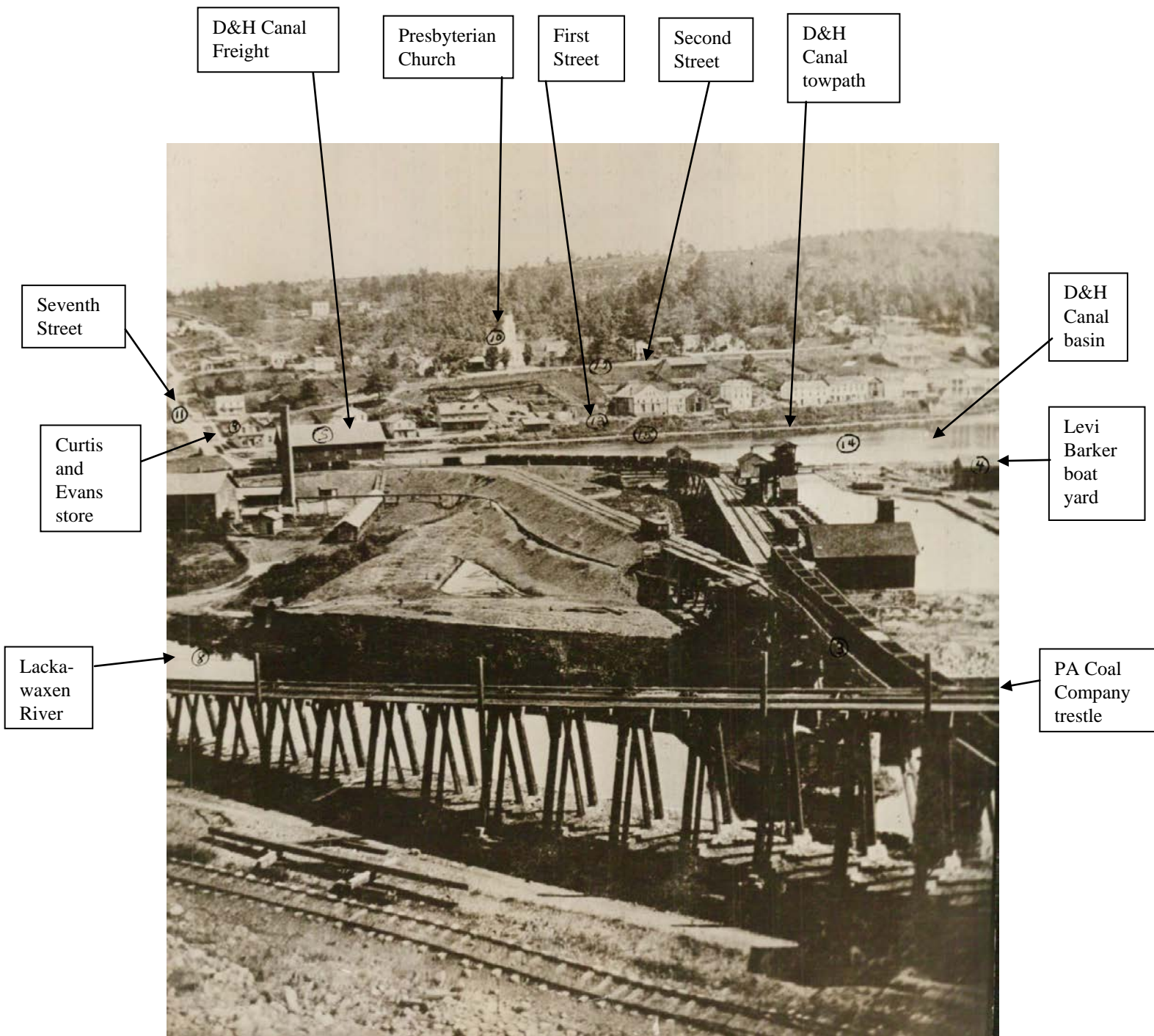
"The work of dismantling the Penna. Coal Co's. Gravity railroad is being pushed with vigor. The engines, rails, and other property are being stored at Dunmore.—*Hawley Times*." (*The Journal*, August 26, 1886, p. 3)

Elisha Atherton Coray:

--railroad financier with substantial PCC holdings.

Coray was born at Greenwood, PA on April 30, 1822 (son of David Coray and Rebecca Atherton). He married Mary J. Perkins. He died in 1909, and his earthly remains are buried in Forty Fort Cemetery, Luzerne County, PA.

Two photographs of Hawley that show the Pennsylvania Coal Company's operations there. The originals from which these copies were produced are in the archives of the Pike County Historical Society, Milford, PA.



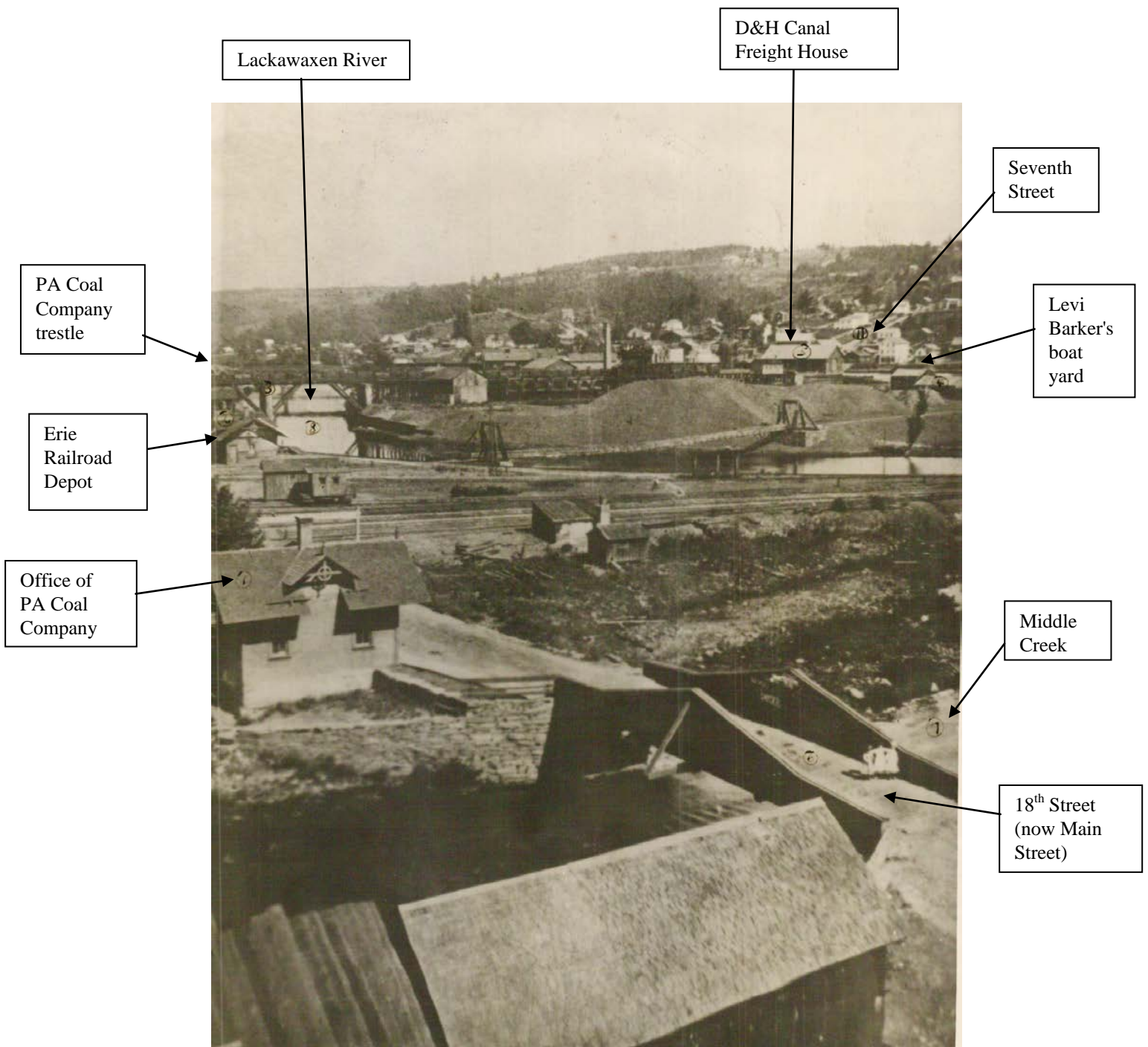
More on Levi Barker, from W. D. LeRoy, p. 64:

"Also in 1849 Levi Barker, anticipating the demand for many more boats to haul the coal of the Pennsylvania Coal Company, left the employ of Christopher Lane's boat works at Honesdale, and established a boat-yard and drydock at Hawley. He was immediately given a contract by the Pennsylvania Company for the construction of twenty-five deck-type boats which were to have a capacity of one hundred forty tons in anticipation of the enlargement of the canal. These were somewhat larger in capacity than those being built for the D. & H., but were as fine as any boat ever put upon the canal and cost \$1,600 each. Barker, during the forty years he continued in business at Hawley, built over six hundred boats."

Reference Note:

"*The Gravity*" *History of the Pennsylvania Coal Company Railroad 1850-1885* by Mary Theresa "T. C." Connolly (Scranton, 1972). An especially good chapter in Connolly's excellent book on the Pennsylvania Gravity is Chapter 4: *Crews* (pp. 27-33). Therein are given the names of a great many of the men who worked on the Pennsylvania Gravity: Superintendent, Assistant Superintendent, Master Mechanics, Despatchers, Telegraph Operators, Water Wheel Runners, Engineers, Firemen, Car Runners, Conductors of the Pioneer, Trainmen on Pioneer, Truck Runners, and Rope Riggers.

"Hawley, 1870. Loading Docks. From the roof of the Nalin home on old 14th Street"
Photograph in the archives of the Pike County Historical Society, Milford, PA

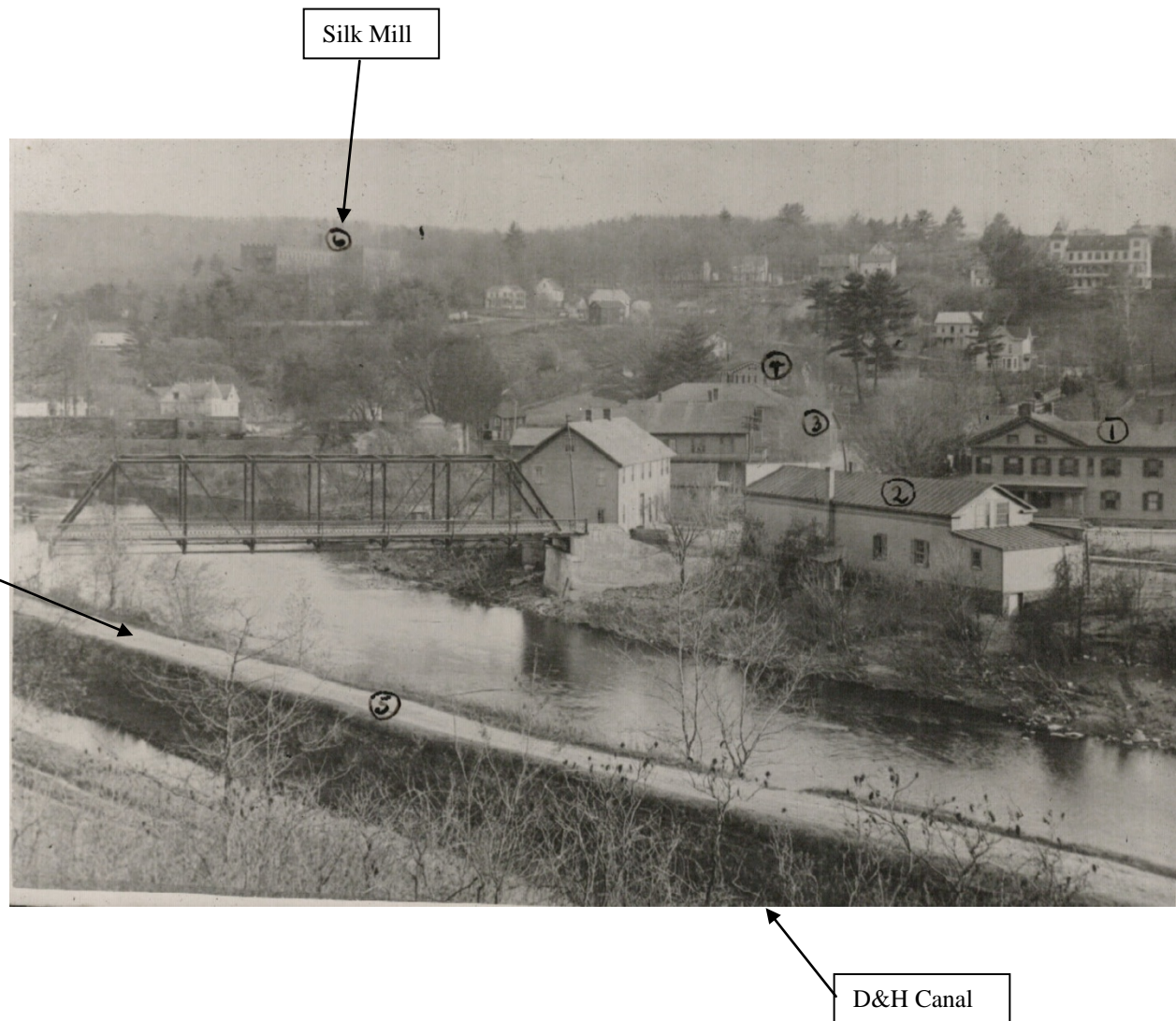


John Baisden

There is an undated newspaper clipping about John Baisden that is glued to the scrapbook page on which this photograph, in the archives of the Pike County Historical Society, is also glued. From that clipping, we learn that John Baisden died at the age of 81 in Saint Petersburg, FL. Funeral and burial at Kingston, NY. Survived by his second wife, an adopted daughter of Saint Petersburg, sons Sherman and Walter, both by his first marriage, of Brooklyn, NY.

"Deceased was well known in this community where he was born at Baisdenville between Hawley and Kimble, son of Mr. and Mrs. John J. Baisden. He was prominently connected in former years with the D. & H. Canal Company as boat builder in charge of their boat yard [at?]. Baisdenville."

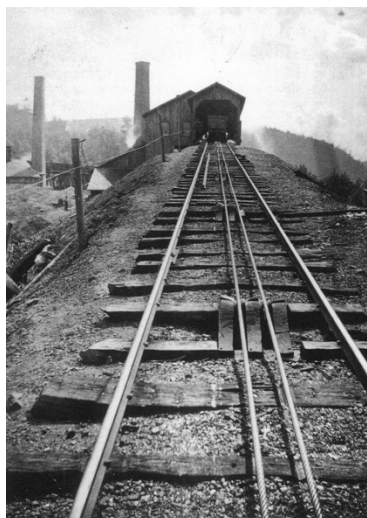
Here is another view of the D&H Canal operations at Hawley. The original of this photograph is in the archives of the Pike County Historical Society, Milford, PA.



Pennsylvania Coal Company's Gravity passenger cars at Hawley, about to ascend the plane for Dunmore. The original of this photograph is in the archives of the Pike County Historical Society at Milford, PA.



Photograph by L. Hensel of Plane No. 7 on the Pennsylvania Coal Company's Gravity Railroad. Photograph made available to the Delaware and Hudson Transportation Heritage Council by Ingrid Peterec, Upper Delaware Scenic & Recreational River, National Park Service.



Here are ten photos that were taken by the author on a Pennsylvania Coal Company Railroad walk on the mountain above Dunmore, under the direction of Sal Mecca, on November 9, 2009:



Sal Mecca, 11-08-2009:

- The PCC Gravity crossed itself [the loaded and light planes and levels] in six places.
- John B. Smith was born in June, 1815, in Wurtsboro, NY. His father was Captain Charles Smith, who served in the War of 1812, and who came to Carbondale in 1828 and worked for the D&H until his death in July 1865. Captain Smith's wife was born Eliza Slingerland, a granddaughter of Captain Bacon of Baconville, later known as Jermyn. In 1829, John B. Smith and his 6 siblings came to Carbondale, where John B. Smith got a job in the D&H machine shop."
- At one point, the PCC owned 7,800 acres of coal lands.
- Three thousand men and boys worked for the Pennsylvania Coal Company

Remains of a plane:



Sal Mecca, 06-08-2013:

- Smith Street in Dunmore is named in honor of John B. Smith.
- I have many of the D&H negatives that were in the collection of Dr. Edward Steers.
- The Pennsylvania Coal Company shops were at Number 6.
- Number 6 was the only double-tracked plane on the PCC Gravity Railroad.
- Only two of the planes on the PCC Gravity had curves: No. 7 curved to the left, and "Old No. 11" curved to the right
- The "hanging rock" on the PCC Gravity was dynamited out of existence in 1884.
- The residence of John B. Smith, at the corner of Elm and Dudley Streets in Dunmore, still stands.
- In 1890, the John B. Smith Hose Company No. 3 of Dunmore was formed. Their hose house was at the corner of Chestnut and Potter.

Remains of a plane:



Remains of a plane:



The 800-foot long tunnel on Level No. 11 (two views):



This tunnel was built to save the expense of another plane at the top of the mountain.



Reservoir on the top of the mountain which provided water for the stationary steam engines on some of the planes. Sal Mecca has located a wooden water pipe (a series of interconnected logs) that emanate from this reservoir.



Remains of a plane:



Remains of a plane:



The light track came back into Dunmore through this gorge.



Moosic Mountain Trees

On 10-25-2009 the LVC-LRCA and the Dunmore Historical Society hosted a hike on the Moosic Mountain above Dunmore to tour the area through which passed the Pennsylvania Coal Company's Gravity Railroad in the nineteenth century. In the course of that walk, S. R. Powell picked up various leaves to document the various species of trees now growing on the mountain. One of those leaves was an American Chestnut leaf.

At his talk/presentation at the Lackawanna Historical Society on November 8, 2009 on the Pennsylvania Coal Company's Gravity Railroad, Salvatore Mecca showed the group a small bag of American chestnuts that he and his wife picked up on the Moosic Mountain above Dunmore. Following that talk/presentation, S. R. Powell said to Salvatore Mecca that he (SRP) would like to go back up on the mountain and have a look at whatever American Chestnut trees could be located.

On 11-15-09, Sal and Mary Ann Mecca and S. R. Powell hiked up the mountain above Dunmore and located many dozens of American Chestnut trees—most of which are in the 15-20-foot range in height, with trunks a couple of inches in diameter. Many of those living specimens of American Chestnut are found in close proximity to blighted specimens of the same size. (The bark-shattering blight usually girdles the trees near their bases.) On the "level" between the head of No. 11 plane (and before the tunnel) they located several American Chestnut trees that are no less than eight or nine inches in diameter and easily 50 feet high—and very healthy. Perhaps these larger trees have gotten beyond the danger of the blight (a fungus bark disease, believed to be of Asiatic origin) that kills many of the smaller American Chestnut trees? In any event, the Meccas and Powell picked up many American Chestnut leaves, as well other leaves, in the course of their walk on November 15, 2009. Representative specimens from among all those leaves are shown hereafter—scanned from the original leaves by SRP.

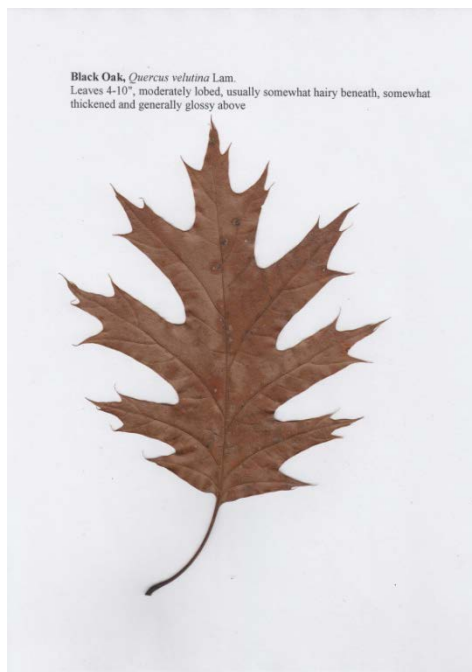
The Meccas and Powell also came upon at least a dozen Canadian Hemlock trees, in a deep ravine, with trunks no less than 3 feet in diameter and easily 80-90 feet high, the trunks being straight as an arrow, with no side branches or blemishes. Those Hemlock trees could easily be 100 years old, or older. Neither the Meccas nor Powell had ever seen larger Hemlocks anywhere.

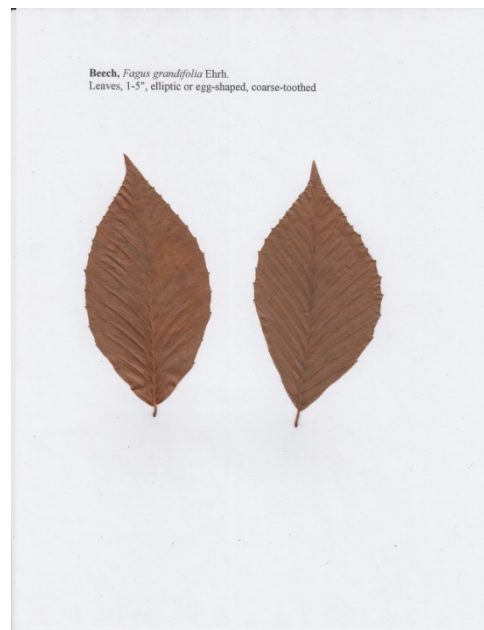
Shown hereafter are representative specimens of leaves, from the Moosic Mountain above Dunmore, from the following species of trees: American Chestnut, Chestnut Oak, Black Oak, Red Oak, Mossycup (Bur) Oak, Sassafras, and Beech.

American Chestnut, *Castanea Borkh.*

Leaves 4-8", long in relation to width, with large prominent teeth on edges; bristle at the end of each tooth curves upwards. Base of leaf blade tapers sharply; leaf is very thin and papery.







Sassafras, *Sassafras albidum* Nees
Leaves 2-9", untoothed, lobed, or not, in 3 patterns
(3 fingers, a thumb and mitten outline, or smooth egg-shaped)



The D&H Gravity Railroad and Canal: Selected Bibliography

Barber, David G. *A Guide to the Delaware & Hudson Canal*, 2003.

Best, G. M. "The Gravity Railroad of the Delaware & Hudson Canal Company," *Railway & Locomotive Historical Society Bulletin* No. 82, April 1951, pp. 7-24.

_____. *Locomotives of Dickson Manufacturing Co.* San Marino, CA, 1966.

Brands, H. W. *Andrew Jackson His Life and Times*. Doubleday, 2005.

Casey, Jr., Edward J. and Dorothy D. Jones. *A History of the Borough of Archbald Pennsylvania*, 1976.

Carbondale newspapers in the archives of the Carbondale Historical Society, 1828-1902.

Clark, J. A., *The Wyoming Valley, Upper Waters of the Susquehanna, and the Lackawanna Coal Region, including Views of the Natural Scenery of Northern Pennsylvania, from the Indian Occupancy to the Year 1875*. (Scranton: J. A. Clark, publisher, 1875).

Connolly, Mary Theresa. "T. C." *The Gravity History of The Pennsylvania Coal Company Railroad 1850-1885*, 1972.

Delaware and Hudson Canal Company. (1) *Record of Deeds. New York to D. & H. C. Co., Providence, PA* (2) *Record of Deeds. Pennsylvania (Wayne, Pike and Susquehanna Counties) to D. & H. C. Co and others, Providence, PA* (3) *Record of Deeds. Pennsylvania. Luzerne County to D. & H. C. Co. and others, Providence, PA*. These three deed volumes are in the archives of the Carbondale D&H Transportation Museum, Carbondale, PA.

Delaware and Hudson Company. *A Century of Progress / History of The Delaware and Hudson Company / 1823-1923*. (Albany: J. B. Lyon Company, Printers, 1925)

_____. *Corporate History of the Delaware sand Hudson Company and Subsidiary Companies*, Volume I, *The Delaware and Hudson Company*. 1906. Transportation Library, University of Michigan, 1906. Contains complete copies of all of the Pennsylvania and New York statutes that relate to the Delaware and Hudson Canal Company and the Delaware and Hudson Company for the period 1823-1906.

_____. *D&H Bulletin* (Volume I, 1, April 1, 1921—Volume XVIII, 6, June 1, 1938.

_____. *Motive Power on the D&H*. 1926.

_____. *Motive Power, Passenger, Freight and Work Equipment*. 1936.

_____. *Passenger and Freight Stations Delaware & Hudson. The Delaware and Hudson Company / Board Of Managers / Inspection of Lines : : June 7th to June 10th, 1928.*

_____. *Passenger, Freight and Work Equipment*. 1927

- Dixon, Stuart. *The Honesdale Branch of the Delaware & Hudson Railroad Rails Through Canaan*, U. S. Department of Justice, Federal Bureau of Prisons, 2004.
- Downing, Andrew Jackson. *The Architecture of Country Houses: Including Designs for Cottages, and Farm-Houses and Villas, With Remarks on Interiors, Furniture, and the best Modes of Warming and Ventilating*, D. Appleton & Company, 1850
- _____. *Cottage Residences: or, A Series of Designs for Rural Cottages and Adapted to North America*, 1842
- _____. *A Treatise on the Theory and Practice of Landscape Gardening, Adapted to North America*, 1841.
- Durfee, J. R. *Reminiscences of Carbondale, Dundaff and Providence, Forty Years Past*. Philadelphia. 1875.
- FitzSimons, Neal. *The Reminiscences of John B. Jervis*, Syracuse University, 1971
- Folsom, Jr., Burton W. *Urban Capitalists Entrepreneurs and City Growth in Pennsylvania's Lackawanna and Lehigh Regions, 1800-1920*. The Johns Hopkins University Press, 1981.
- Hartmann, Edward George, *Americans from Wales* (New York, 1883).
- Henretta, James A. *The Evolution of American Society, 1700-1815. An Interdisciplinary Analysis*. (D. C. Heath and Company, Lexington, MA, 1973)
- History of Luzerne Lackawanna and Wyoming Counties, PA. with Illustrations and Biographical Sketches of Some of Their Prominent Man and Pioneers*. (New York: Munsell & Co., 1880).
- Hitchcock, Frederick L., and John P. Downs. *History of Scranton and the Boroughs of Lackawanna County*, Volume II, 1914.
- Hollister, H., M.D., *History of the Lackawanna Valley*. Fifth Edition. Philadelphia, 1885.
- _____. *History of the Delaware and Hudson Canal Company*. 1880. Unpublished typescript in the collection of the D. & H. Canal Historical Society and Museum, High Falls, NY.
- Hudson Coal Company. *The Story of Anthracite*. New York, 1932.
- Le Roy, Edwin. *The Delaware and Hudson Canal: A History*. (Honesdale, PA: Wayne County Historical Society, 1950, 1980).
- _____. *The Delaware & Hudson Canal and its Gravity Railroads*. (Honesdale, PA: Wayne County Historical Society, 6th printing, 1980).
- Leslie, Vernon. *Hones: The Early Years*. Honesdale, 1981.
- _____. *Honesdale and the Stourbridge Lion*. Honesdale, 1979.

- Logan, Samuel C., *The Life of Thomas Dickson*. Scranton, 1888.
- Lowenthal, Larry. *From the Coalfields to the Hudson: A History of the Delaware and Hudson Canal*. (Fleischmanns, New York: Purple Mountain Press, 1997).
- Mathews, Alfred. *History of Wayne, Pike and Monroe Counties, Pennsylvania*, 1886
- Miller, Donald L. and Richard E. Sharpless. *The Kingdom of Coal / Work, Enterprise, and Ethnic Communities in the Mine Fields*. (Philadelphia, PA; University of Pennsylvania Press, 1985).
- Nye, Russel Blaine. *Society and Culture in America 1830-1860*.
- Osterberg, Matthew M. *The Delaware & Hudson Canal and The Gravity Railroad*. Images of America, 2002.
- Portrait and Biographical Record of Lackawanna County, Pennsylvania, 1897 (PABRLCP)*
- Proceedings of the Canal History and Technology Symposium*. Volume I, January 30, 1982. Published by the Center for Canal History and Technology, Easton, PA, 1982. ("Ellet and Roebling" by Donald Sayenga, pp. 114-154; "The Pennsylvania Coal Company's Gravity Railroad" by Dr. Edward Steers, pp. 155-221)
- _____ Volume II, March 26, 1983. 982. Published by the Center for Canal History and Technology, Easton, PA, 1983. ("The Delaware and Hudson Canal Company's Gravity Railroad" by Dr. Edward Steers, pp. 129-203)
- _____ Volume III, 1984. Published by the Center for Canal History and Technology, Easton, PA, 1984. ("A Historical Survey of the Erie and Wyoming Valley Railroad")
- _____ Volume XI, 1992. Published by the Center for Canal History and Technology, Easton, PA, 1992. ("Delaware & Hudson Company vs. Pennsylvania Coal Company during the 1850s" by Spiro G. Patton)
- Rashleigh, Alice V. *Carbondale, My Carbondale. A History of the Pioneer City*, 1951
- Ruth, Philip. *Of Pulleys and Ropes and Gear, The Gravity Railroads of The Delaware and Hudson Canal Company and The Pennsylvania Coal Company* (Wayne County Historical Society, Honesdale, 1997).
- Sanderson, Dorothy Hurlbut. *The Delaware & Hudson Canalway / Carrying Coals To Rondout*, 1965
- Sayenga, Donald. *The Birth and Evolution of the American Wire Rope Industry*, 1980
- _____ *Ellet and Roebling*, 1983
- Shaughnessy, Jim. *Delaware & Hudson / The History of an Important Railroad Whose Antecedent Was a Canal Network to Transport Coal*. (Berkeley, CA: Howell-North Books, 1982).

Supreme Court, Ulster County. The President, Managers and Company of the Delaware and Hudson Canal Company vs. The Pennsylvania Coal Company: Pleadings and Testimony taken before J. H. Dubois, Referee. New York, 1858.

Upper Lackawanna Watershed Conservation Management Plan, Final Report, January, 2002.

Wakefield, Manville B. *Coal Boats to Tidewater The Story of the Delaware and Hudson Canal* South Fallsburg, NY: Steingart Associates, 1965).

Wayne County Historical Society Newsletter, July-August-September 2012 issue.

Whiting, Charles W. "An American Gravity Railroad," *Cassier's Magazine*, Volume 8. No. 2, 1895.

MAPS

Atlas of the City of Scranton and Borough of Dunmore, published by L. J. Richards & Co., Philadelphia, PA 1888; also 1899 edition; also 1918 edition by Volk & Kuhls.

Baist, G. W. *Atlas of Wyoming and Lackawanna Valleys Luzerne and Lackawanna Counties, Pennsylvania*, Philadelphia, 1894.

Beers, D. G. *Atlas of Luzerne County, Pennsylvania. From actual Surveys by and under the direction of D. G. Beers.* (Published by A. Pomeroy & Co., Philadelphia, 1873).

Carbondale Including Simpson and Whites Crossing, Lackawanna County, Pennsylvania. (Sanborn Map Co., New York, April 1930).

City Atlas of Scranton, Pennsylvania. (G. M. Hopkins, C. E., Philadelphia, 1877).

City of Scranton and Borough of Dunmore, Pennsylvania, 1898.

Delaware and Hudson Canal Company. *Gravity Railroad / Carbondale to Honesdale*, 1895. Maps drawn by W. E. Anderson. Carbondale D. & H. Transportation Museum, Carbondale, PA.

_____. Map volume: *Delaware & Hudson Company's Railroad, Honesdale Branch, Carbondale to Honesdale*. March 1901. Maps drawn by W. E. Anderson.

Sanborn Map Company's Insurance Map of Scranton, Pennsylvania. April 1884 edition; also Volume III, 1956.

Tappan, George William . *Map of the City of Carbondale, Lackawanna County, Pennsylvania. From Actual Surveys By and Under the Direction of George William Tappan.* (Scranton, PA, October 18, 1909)